AGENDA
Board of Public Works Meeting
Tuesday, June 30, 2015 – 7:00 P.M.
Jackson Village Hall
N168W20733 Main Street

1. Call to Order and Roll Call.

2. Approval of Minutes for May 26, 2015, meeting.

3. Pay Request #5 – Digester Improvement Project.

4. Change Order #1 – Digester Improvement Project.

5. Jackson Water Utility Master Plan Update.

6. Reinstalling Cedar Creek Business Sign

7. Review of quotes for painting of Blue Water Tower – Tower Drive.

8. Discussion on submittal of CMAQ for STH 60 and CTH P Intersection

9. Review of Jackson Telecomm Utility and Ethoplex Contract.

10. Director of Public Works Report.

11. Citizens/Village Staff to address the Board.

12. Adjourn.

Persons with disabilities requiring special accommodations for attendance at the meeting should contact the Village Hall at least one (1) business day prior to the meeting.

It is possible that members of the Village Board may attend the above meeting. No action will be taken by any governmental body at this meeting other than the governmental body specifically referred to in this meeting notice. This notice is given so that members of the Village Board may attend the meeting without violating the open meeting law.

DRAFT MINUTES
Board of Public Works Meeting
Tuesday, May 26, 2015 – 7:00 P.M.
Jackson Village Hall
N168W20733 Main Street

1. Call to Order and Roll Call.

Chairman Tr. Don Olson called the meeting to order at 7:00 p.m.
Members present: Tr. Jack Lippold, Tr. Scott Mittelsteadt, Brian Heckendorf, Linda Granec, and Scott Thielmann.
Members excused: Corinne Benson.
Staff present: Brian Kober and John Walther.

2. Approval of Minutes for April 28, 2015, meeting.

Motion by Brian Heckendorf, second by Tr. Scott Mittelsteadt to approve the minutes of the April 28, 2015, Board of Public Works meeting.
Vote: 6 ayes, 0 nays. Motion carried.

3. Review of Village Sidewalk Policy.

Brian Kober reviewed the sidewalk policy that was put into place in 1991. Some areas were not in the Village when the policy was created. The policy needs to be updated. John Walther presented a draft resolution replacing a sidewalk location and construction policy for the Village. Motion by Scott Mittelsteadt, second by Linda Granec recommend the Village Board approve the draft resolution replacing a sidewalk location and construction policy for the Village.
Vote: 6 ayes, 0 nays. Motion carried.

4. Pay Request #4 – Digester Improvement Project.

Brian Kober reviewed the project. Digester tank #1 has been completed and placed online. Digester tank #2 has been cleaned and inspection of the roof is being completed. Early indications are that the roof will need to be structurally repaired in order to place back in service. Motion by Tr. Olson, second by Brian Heckendorf to recommend approval of Pay Request #4 in the amount of $64,742.11.
Vote: 6 ayes, 0 nays. Motion carried.

5. Review of Bids for Georgetown Dr. Reconstruction Project.

Brian Kober reviewed the three bids received for the project with the lowest bidder being Advance Construction, Inc. of Green Bay in the amount of $619,153.10. Trustee Olson asked if the Jackson Sewer and Water Utilities will pay their portion of the project. Village Engineer Kober said yes that is the plan. Motion by Brian Heckendorf, second by Tr. Mittelsteadt, to recommend approval of the low bid from Advance Construction, Inc. in the amount of $619,153.10 for the Georgetown Dr. Reconstruction Project.
Vote: 6 ayes, 0 nays. Motion carried.

6. Verizon Wireless Antenna Modification Project – White Water Tower.

Brian Kober reviewed with the Board the proposed changes of the Verizon Wireless Antenna Modification Project. The Village had approved the modification in December 2014, although, Verizon is now asking for land to install a cabinet. The additional land allows the financial

DRAFT

agreement to be modified. Motion by Scott Thielmann, second by Linda Granec to recommend approval of the modified plan and financial agreement between the Village and Verizon Wireless as submitted.
Vote: 6 ayes, 0 nays. Motion carried.

7. Review of Jackson Telecomm Utility and Ethoplex Contract.

The agenda item was requested by Tr. Lippold for better understanding of the financial status and compliance of the agreement with Ethoplex. Tr. Lippold asked, if Public Safety communication is being jeopardized by Ethoplex short falls? Mr. Kober answered no, the Police Department is on a separate system by AT & T and the main communication for the Police and Fire Departments are conducted through the County radio system. Scott Thielmann inquired if Ethoplex has reached out to the Village to make things right. Mr. Walther responded Ethoplex has not reached out, and staff is trying to setup a meeting with the owner Keefe John to address all the issues. Brian Heckendorf requested if the Village had a backup plan. Mr. Kober said staff is working on options and will present during the budget process. After further discussion, staff will schedule a meeting with Ethoplex, and report to the Board of Public Works at a future meeting.

8. Discussion of Board of Public Works Scheduled Meeting Dates.

The Village Code requires the Board of Public Works meeting generally to occur the Tuesday evening preceding the meeting of the Plan Commission. Consensus of the Board is to generally have the meeting the last Tuesday of the Month. The next Board of Public Works meeting will be June 30, 2015.

9. Director of Public Works Report.

Brian Kober reviewed the Public Works Report.
Motion by Linda Granec, second by Tr. Lippold to place the report on file.
Vote: 6 ayes, 0 nays. Motion carried.

10. Citizens/Village Staff to address the Board.

Brian Kober reviewed with the Board as per the 2014 Village Audit Report at the May 2015 Village Board meeting, the Jackson Water and Sewer Utility would have a 3% rate increase. The date for the increase to occur is July 15, 2015. The Village Board will review the rate increase at the June 9, 2015 meeting.

11. Adjourn.

Motion by Linda Granec, second by Tr. Brian Heckendorf to adjourn at 7:52 p.m.
Vote: 6 ayes, 0 nays. Motion carried.

Respectfully submitted by: Brian W. Kober, P.E., Director of Public Works

DRAFT

Clark Dietz
ENGINEERS

June 23, 2015

Mr. Brian Kober, P.E.
Village of Jackson
N168 W20733 Main Street
Jackson, WI 53037

Re: Digester Improvements Project

Dear Mr. Kober:

Clark Dietz, Inc. has reviewed the fifth pay request from Sabel Mechanical, LLC for the Digester Improvements Project currently underway at the wastewater treatment plant. The total amount requested on this draw is $51,268.31 for the following work completed:

- General contract work.
- Painting work.
- Installation of process piping.
- Electrical work in the digester building.
- Installation of digester mixing equipment.
- Work on the digester covers.

Less the 5% retainage, Sabel is requesting a payment of $48,704.89. At this time Clark Dietz, Inc. takes no exceptions to their request and recommends payment by the Village.

Sincerely,
Clark Dietz, Inc.

Diane L. Thoune

Diane L. Thoune, P.E.
Project Engineer

APPLICATION AND CERTIFICATE FOR PAYMENT

TO OWNER:
Village of Jackson
N168 W20733 Main Street
Jackson, WI 53037

FROM CONTRACTOR:
Sabel Mechanical LLC
N7295 Winnebago Drive
Fond du Lac, WI 54935

CONTRACT FOR: Digestor Improvements

PROJECT:
Village of Jackson WWTP
Digestor Improvements
Jackson, WI 53037

VIA ARCHITECT:
Clark Deitz, Inc
5017 Green Bay Road
Suite 126
Kenosha, WI 53144

APPLICATION #: 1010-5
PERIOD TO: 06/05/15
PROJECT NOS:
CONTRACT DATE: 08/01/14

Distribution to:
- [ ] Owner
- [ ] Const. Mgr
- [x] Architect
- [ ] Contractor
- [ ]

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract.
Continuation Sheet is attached.

1. ORIGINAL CONTRACT SUM----------	$	367,900.00
2. Net change by Change Orders----------$	$	
3. CONTRACT SUM TO DATE (Line 1 +/- 2)	$	367,900.00
4. TOTAL COMPLETED & STORED TO DATE-$ (Column G on Continuation Sheet)		205,600.00
5. RETAINAGE:		
a. 5.0% of Completed Work (Columns D+E on Continuation Sheet)	$	10,280.00
b. 10.0% of Stored Material (Column F on Continuation Sheet)	$	
Total Retainage (Line 5a + 5b or Total in Column 1 of Continuation Sheet--------	$	10,280.00
6. TOTAL EARNED LESS RETAINAGE---------- (Line 4 less Line 5 Total)	$	195,320.00
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 6 from prior Certificate)----------	$	146,615.11
8. CURRENT PAYMENT DUE----------	$	48,704.89
9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 less Line 6)	$	172,580.00

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner		
Total approved this Month		
TOTALS		
NET CHANGES by Change Order		

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown therein is now due.

CONTRACTOR:

By: _____ Date: 6/5/15

State of: _____
County of: _____
Subscribed and sworn to before me this ____ day of _____

Notary Public: _____
My Commission expires:

CERTIFICATE FOR PAYMENT

In accordance with Contract Documents, based on on-site observations and the data comprising application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED ---------- $_____

(Attach explanation if amount certified differs from the amount applied for. Initial all figures on this application and on the Continuation Sheet that are changed to conform to the amount certified.)

ARCHITECT:

By: _____ Date: _____

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner of Contractor under this Contract.

CONTINUATION SHEET

ATTACHMENT TO PAY APPLICATION

PROJECT:
Village of Jackson WWTP
Digestor Improvements
Jackson, WI 53037

APPLICATION NUMBER: 1010-5
APPLICATION DATE: 08/19/14
PERIOD TO: 5-Jun-15
ARCHITECT'S PROJECT NO:

A	B	C	D	E	F	G		H	I
Item No.	Description of Work	Scheduled Value	Work Completed		Materials Presently Stored (Not In D or E)	Total Completed And Stored To Date (D + E + F)	% (G/C)	Balance To Finish (C - G)	Retainage
			From Previous Application (D + E)	This Period					
1	General Contract work	29,317.00	22,161.65	7,155.35		29,317.00	100%		1,465.85
2	General Demolition Work	13,060.00	13,060.00			13,060.00	100%		653.00
3	Painting Work	14,880.00	3,500.00	11,380.00		14,880.00	100%		744.00
4	Process Piping	47,544.00	32,745.04	14,498.96		47,244.00	99%	300.00	2,362.20
5	Electrical Work	33,659.00	29,500.00	4,159.00		33,659.00	100%		1,682.95
6	Digestor Mxing Equipment	114,000.00		12,000.00		12,000.00	11%	102,000.00	600.00
7	Digestor Covers	55,440.00	53,365.00	2,075.00		55,440.00	100%		2,772.00
8	Allowance	20,000.00						20,000.00	
9	Digestor Inspection	40,000.00						40,000.00	
10									
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27									
28									
	SUBTOTALS PAGE 2	367,900.00	154,331.69	51,268.31		205,600.00	56%	162,300.00	10,280.00

Document G701

Change Order

PROJECT: *(Name and Address)* Jackson WWTP Digestor Improvements Jackson, WI 53037	**CHANGE ORDER NUMBER:** 1	OWNER	☐
	DATE: 6/16/2015	ARCHITECT	☑
	ARCHITECT'S PROJECT NO:	CONTRACTOR	☑
TO CONTRACTOR: *(Name and Address)* Sabel Mechanical LLC N7295 Winnebago Drive Fond du Lac, WI 54935		FIELD	☐
	CONTRACT DATE: 8/1/2014	OTHER	☐
	CONTRACT FOR: Digestor Improvements		

The Contract is changed as follows:
(Include, where applicable, any undisputed amount attributable to previously executed Construction Change Directives)

The original Contract Sum was	$	$367,900.00
The net change by previously authorized Change Orders	$	$0.00
The Contract Sum prior to this Change Order was	$	$367,900.00
The Contract Sum will be increased by this Change Order in the amount of	$	$106,783.60
The new Contract Sum including this Change Order will be	$	$474,683.60

The Contract Time will be increased by <enter days in words> ( ) days

The date of Substantial Completion as of the date of this Change Order therefore is

(Note: This Change Order does not include changes in the Contract Sum, Contract Time or Guaranteed Maximum Price which have been authorized by Construction Change Directive until the cost and time have been agreed upon by both the Owner and Contractor, in which case a Change Order is executed to supersede the Construction Change Directive.)

NOT VALID UNTIL SIGNED BY THE ARCHITECT, CONTRACTOR AND OWNER.

Clarke Deitz, Inc. ARCHITECT *(Firm name)*	Sabel Mechanical LLC CONTRACTOR *(Firm name)*	Village of Jackson OWNER *(Firm name)*
5017 Green Bay Road, Kenosha, WI ADDRESS	N7295 Winnebago Drive, WI 54935 ADDRESS	N168 W20733 Main St., Jackson, WI 5493 ADDRESS
Diane L. Thoune BY *(Signature)*	BY *(Signature)*	BY *(Signature)*
Diane L. Thoune *Typed name*	Doug Sabel, Owner *Typed name*	*Typed name*
6/22/15 DATE	DATE	DATE

QUOTE

SABEL MECHANICAL LLC
DOUG SABEL
N7295 Winnebago Drive Fond du Lac, WI 54935
920-904-5579
doug@sabelmechanical.com

DATE: 6/15/15

QUOTE #:

SEND TO
Village of Jackson Jackson WWTP

Date	Job	Payment Term	QUOTE EXPIRES
6/15/15	Digester Cover	30 DAYS	30 DAYS

QTY	DESCRIPTION	UNIT PRICE	LINE TOTAL
	Sabel Mechanical LLC will supply labor, materials and equipment to install scaffolding inside of digester to remove and replace 32 pieces of cross bracing supplied by Walker Process Equipment for the 8 main trusses.		$38,758.00
	Porta Painting Quote #34789		$58,318.00
	Profit and overhead 10%		$9707.60
		SUBTOTAL	$
		SALES TAX	$
		TOTAL	$106,783.60

portapainting

Porta-Painting, Inc. - 313 Travis Lane - Waukesha, WI 53189 - **ph** (262)-970-9713 - **fax** (262)-970-9723 - **email** john.a@portapainting.com

June 3, 2015

QUOTE #34789

Attn: Mark Sabel
Sabel Mechanical
Email: mark@sabelmechanical.com

Subject: Blast and paint underside of Digester #2 35' diameter cover in place

Scope:

- All access will be through 30" man ways.
- General contractor will erect scaffolding in the digester with a floor approximately 7' below the underside of the cover. There will be a ladder from the floor to the man way.
- First abrasive blast will be perimeter of 8 trusses to allow for removal of cross bracing and re-welding of new steel cross bracing.
- Abrasive blast trusses, underside of cover, gas dome, interior and exterior side of skirt to an SSPC-SP 10 finish with a 1.5 to 2 mil profile. Blow down surfaces.
- Vacuum up media. Media will be tested and disposal will be in a licensed landfill.
- Spray 1 prime coat Tnemec Series 120 Vinester 5002 at 12-18 mils DFT on blasted surfaces.
- Spray 1 coat Series 120 on welds.
- Spray 1 finish coat Series 120 Vinester 5001 at 12-18 mils DFT.

Total Base Bid: $58,160.00

Optional Deduct: $6,350.00 to apply 1 coat Tnemec Series 69 primer and 1 coat Series 46 coal tar epoxy at 16-20 mils DFT instead of Series 120.

Surface temperature of steel must be at least 60 degrees for application of Series 120.

Notes:

- Work will be done first shift Monday – Friday.
- Owner will supply all power and hook-ups.
- We will park media hopper, bulker trailer and equipment next to digester or in parking spaces.
- We are assuming that the existing coating is non-hazardous and does not contain heavy metals.
- Digester will be cleaned out by others and ready for blasting and painting.
- Eductor tube and supports will be removed by others prior to starting work.

Exclude:

- Blasting and painting of man ways, all piping and exterior skirt.
- Dehumidifaction equipment, heat and holiday testing.
- Hazardous media disposal costs.
- Final cleaning of digester tank surfaces.

Valid until July 3, 2015
TERMS: Net 30, Exhibit A
Building Contractor Registration Number 1096244

Visit our new website at: www.portapainting.com

Thank you for allowing us to quote on your requirements.
Exhibit A of Terms and Conditions is included
Sales tax for personal property is not included.

By: John Andritsch _____
John Andritsch, Project Manager/Estimator

This quote is accepted including Exhibit A.

By _____

Title _____

Date _____

Exhibit A
PORTA-PAINTING, INC. TERMS AND CONDITIONS

Porta-Painting's Proposal is expressly conditioned upon Customer's unconditional acceptance of the following Terms and Conditions:

1. **Acceptance.** This proposal constitutes a binding agreement ("Agreement") when signed by Customer's duly authorized representative, which Agreement is expressly conditioned upon and limited to the terms set forth herein. Any additional terms are void unless accepted in writing by Porta-Painting.
2. **Sequencing.** This proposal is based upon proper sequencing per PDCA Standard P7-99. Work performed out of sequence will effect the cost of Porta-Painting performing our work. These additional costs will be passed on to the Customer.
3. **Payment.** Customer shall pay Porta-Painting within thirty (30) days after receipt of Porta-Painting's invoice. Customer shall be liable for expenses, including attorneys fees and costs, incurred by Porta-Painting in connection with any action taken to collect payments due from Customer.
4. **Changes.** If any changes in the work requested by Customer cause an increase or decrease in the cost or time required for the performance, an equitable adjustment shall be made and this Order shall be modified in writing accordingly.
5. **Warranty.** Porta-Painting warrants that the materials and workmanship provided by it shall be free of defects and shall conform to the description and specifications described in this Agreement and any specifications and drawings incorporated by reference herein. **All other warranties, express or implied, including any warranties of merchantability or fitness for a particular purpose are excluded.**
6. **Delay Damages.** Porta-Painting shall not be liable for damages delays occasioned by causes beyond its control, including but not limited to the action or failure to act by others, fire, act of God, or unusually severe weather. Porta-Painting is not responsible for any indirect expenses, overhead, incidental or consequential damages of Customer under any circumstances as a result of such delays.
7. **Termination.** Porta-Painting may terminate this Agreement or any part thereof for cause in the event Customer fails to comply with any of its terms and conditions. In the event of termination for cause Customer shall be liable to, indemnify and hold harmless Porta-Painting against any and all damages, including attorneys fees, sustained by reason thereof.
8. **Assignment.** No part of this Agreement may be assigned or without the written approval of Porta-Painting.
9. **Waiver.** Porta-Painting's failure to insist on performance of any of the terms or conditions of this Agreement or to exercise any rights or privileges or Porta-Painting's waiver any Customer breach shall not thereafter waive any other terms, conditions or privileges, whether of the same or similar type.
10. **Modification of Agreement.** This Agreement, including the terms and conditions, constitutes the complete provisions of the parties' contract. No prior written or oral representation shall in any way modify these terms and conditions. In addition, Customer expressly agrees that any modification of this Order will only be effective if agreed to by Porta-Painting in writing.
11. **Entire Agreement.** This document represents the ENTIRE AGREEMENT between the parties. All representations and warranties, whether oral or written, regarding the subject matter of this Agreement are contained herein. All prior and contemporaneous conversations, negotiations, possible representations and warranties with respect to the subject matter hereof are waived and superseded by this Agreement.
12. **PDCA Standards.** Painting and Decorating Contractors of America Standards P1-92 and P4-94 are incorporated herein by reference.
13. **Insurance.** Customer agrees to pay for the costs of any insurance coverage beyond that normally carried by Porta-Painting. Any provision of this Agreement to the contrary notwithstanding, Port-Painting shall not provide waivers of subrogation, indemnification against the negligence of others, primary coverage under its liability polices for additional named insureds, if any, nor limit its liability under workers' compensation acts, disability benefit acts or other employee benefit acts by indemnification or otherwise.
14. **Legality of Terms.** If any provision in these Terms and Conditions is stricken or deemed illegal, the remaining terms shall remain in full force and effect.
15. **Jurisdiction and Venue.** Wisconsin law shall apply to interpret and govern this Agreement and these Terms and Conditions, as well as all disputes arising out of them. Venue of any disputes regarding this Agreement shall be in Milwaukee County, Wisconsin. Further, by accepting this proposal, Customer agrees to be subject to personal jurisdiction in the State of Wisconsin.
16. **Dispute Resolution.** Disputes relating in any way to this Agreement shall be settled by arbitration conducted by the American Arbitration Association (AAA) in accordance with its Construction Industry rules and procedures, except only that a single arbitrator shall be used. The decision of the arbitrator shall be final and binding with respect to all matters submitted to arbitration, shall be enforceable in accordance with the provisions of the Wisconsin Arbitration Act and attorney's fees shall be awarded to the prevailing party in the arbitration.
17. **Backcharges.** The following conditions must be met before a backcharge will be accepted: Porta-Painting must be notified within 5 business days of the occurrence. Indisputable evidence that the damage was done solely by Porta-Painting's employees or Porta-Painting's subcontractor must be present. Porta-Painting will be directly involved in the negotiation to remedy the situation and agree on a dollar value prior to the repair being completed.
18. **Prime Contracts.** Prime Contracts incorporated solely by the contract language of the General Contractor 's contract documents shall be excluded unless written copy of the Prime Contract is provided with contract documents from the General Contractor. Upon receipt and review of the Prime Contract documents, bid may be withdrawn or extra costs assessed based on the additional burden placed on Porta-Painting by the Prime Contract.
19. **Disposal.** Porta-Painting will gather all debris and place into dumpster provided by owner. Porta-Painting will remove all solvents used for cleaning equipment and unopened untinted materials. All open and/or tinted materials will be left with owner.

(rev 5-06)

06-05-2015

QUOTE

18692

CONTRACT#: UW03406

WALKER PROCESS EQUIPMENT
A DIVISION OF MCNISH CORPORATION
840 N RUSSELL AVE
AURORA, ILLINOIS 60506
PHONE: (630) 892-7921
FAX: (630) 892-7951
Brian Freeman
(630) 264-5244
bfreeman@walker-process.com

CUSTOMER: SABEL MECHANICAL

JACKSON, WI

CONTACT: MARK GREBE
PHONE: 1-920-251-7694
FAX:

JOB NAME: JACKSON WI
JACKSON, WI

QTY	DESCRIPTION	UNIT	AMOUNT	SHIPMENT
8	TRUSS DIAGONAL MEMBER REF NUMBER 10	90.00	720.00	1 WEEK
8	TRUSS CROSS MEMBER REF NUMBER 11	75.00	600.00	1 WEEK
8	TRUSS CROSS MEMBER REF NUMBER 12	75.00	600.00	1 WEEK
8	TRUSS OUTSIDE DIAGONAL MEMBER REF NUMBER 13	55.00	440.00	1 WEEK

Net 15 Days after Shipment $2,360.00

NOTE: ALL PARTS LISTED WOULD SHIP BARE METAL (NO PAINT). ALL PARTS LISTED ARE IDENTICAL REPLACEMENT PARTS TO PARTS ORIGINALLY SUPPLIED UNDER CONTRACT UW03406.

NOTE:
PRICES ARE FIRM FOR THIRTY (30) DAYS FROM THIS QUOTATION. ALL PRICES QUOTED ARE BASED ON BUYERS ACCEPTANCE TO THE COMPANIES STANDARD TERMS OF SALES, AND/OR ADDITIONAL TERMS ON THIS QUOTATION. PRINTED COPIES CAN BE MAILED UPON WRITTEN REQUEST. WALKER PROCESS IS NOT REGISTERED TO COLLECT OR PAY TAXES FOR YOUR PURCHASE OF MATERIALS.

THE PRICES QUOTED ARE SUBJECT TO ADJUSTMENT TO REFLECT CHANGES IN THE COST OF MATERIAL (A) AND OTHER ITEMS (B) TO WALKER PROCESS DIVISION OF MCNISH CORPORATION THAT OCCUR BETWEEN QUOTATION AND TIME MATERIALS ARE PURCHASED AS MEASURED BY:
A. THE APPROPRIATE MATERIAL INDICES, SUCH AS NORTH AMERICAN CARBON STEEL PRICE INDEX.
B. PRICE REVISIONS FOR ITEMS NOT MANUFACTURED BY WALKER PROCESS, DIVISION OF MCNISH CORPORATION.

SIGNED: _____ DATE: _____

Delivery Terms
F.O.B. Aurora, IL or point of shipment with freight prepaid and added to the invoice.

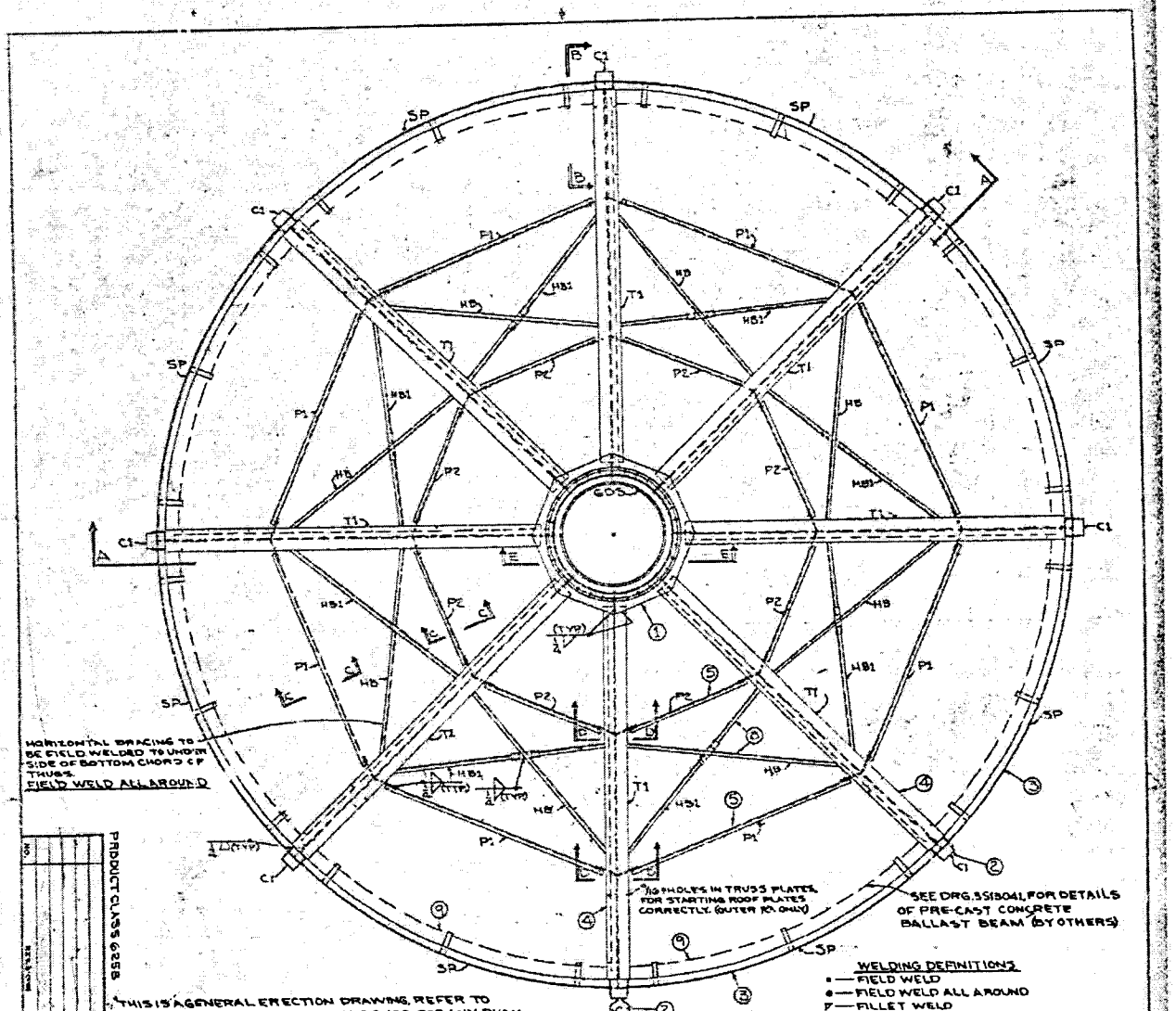
Payment Terms
Net 15 Days of Order

Minimum Order
$50.00

NOTE: Credit Card Orders are subject to 3% CC company charge.

When ordering parts, please refer to Contract Number: **UW03406** and Quote No. **18692**

BY: **Brian Freeman - (630) 264-5244** **REPAIR SALES**



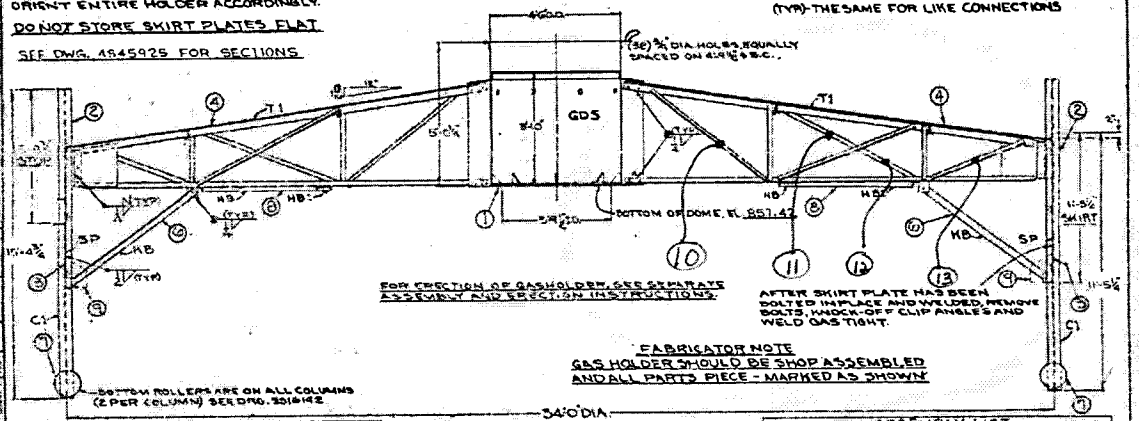
WELDING DEFINITIONS
- • — FIELD WELD
- ● — FIELD WELD ALL AROUND
- ▷ — FILLET WELD
- □ — PLUG WELD
- ¼ — SIZE OF WELD - ¼"
- (TYP) - THE SAME FOR LIKE CONNECTIONS

"THIS IS A GENERAL ERECTION DRAWING, REFER TO ANCHORAGE DRAWINGS FOR SPECIFIC JOB, FOR ANY PLAN VIEW ORIENTATION OF ENTRANCE HATCH LOCATIONS AND ORIENT ENTIRE HOLDER ACCORDINGLY."

DO NOT STORE SKIRT PLATES FLAT

SEE DWG. 1845925 FOR SECTIONS

PRODUCT CLASS 6258



FOR ERECTION OF GASHOLDER, SEE SEPARATE ASSEMBLY AND ERECTION INSTRUCTIONS

AFTER SKIRT PLATE HAS BEEN BOLTED IN PLACE AND WELDED, REMOVE BOLTS, KNOCK-OFF CLIP ANGLES AND WELD GAS TIGHT.

FABRICATOR NOTE
GAS HOLDER SHOULD BE SHOP ASSEMBLED AND ALL PARTS PIECE - MARKED AS SHOWN

SECTION A-A

ERECTION BOLTS	
24 - 3/4" DIA.	HEX NUTS ON DOME TO SUPPORT
36 - 3/4" x 1 1/2" LG.	TRUSSES TO DOME SUPPORT
24 - 3/4" x 1 1/2" LG.	TRUSSES TO COLUMNS (C1)
48 - 3/4" x 1 1/2" LG.	SKIRT PLATES TO COLUMNS
24 - 3/4" x 1 1/2" LG.	PURLINS TO TRUSSES
48 - 3/4" x 1 1/2" LG.	KNEE BRACE TO COL. & TRUSSES
24 - 3/4" WASHERS	STD PLAIN PURLINS TO TRUSSES

ASSEMBLY LIST	
1	GAS DOME SUPPORT (GDS)
2	COLUMNS (C1)
3	SKIRT PLATES (SP)
4	TRUSSES (T1)
5	PURLINS (P1 & P2)
6	KNEE BRACE (KB)
7	BOTTOM ROLLERS
8	TRUSS HORIZONTAL BRACING (HB & HB1)
9	CONCRETE BALLAST BEAMS (BY OTHERS)

STRUCTURAL ASSEMBLY 355' FLOAT-A-SEAL GAS HOLDER

WALKER PROCESS EQUIPMENT AURORA, ILL. U.S.A.

From: Diane L. Thoune
To: Mark@sabelmechanical.com
Cc: dirpubwks@villageofjackson.com; utilitysupt@villageofjackson.com
Subject: Jackson Digester Cover #2 request for quotation
Date: Friday, May 29, 2015 11:35:35 AM
Attachments: Secondary Digester Inspection 052115.pdf

Hello Mark,

I recently performed an inspection of the cover on Digester No. 2 at the Jackson WWTP. As you know, sections of the cover trusses are severely degraded and in need of repair. Please see the attached memo describing my findings. The Village is considering various options for the cover repairs and would like to request quotations from you for the following work:

1. Replacement of existing truss cross bracing with plain steel, sized as indicated in the attached memo. All the existing cross bracing shall be removed and disposed of according to the Detailed Specifications. Fastening of the new bracing to the existing trusses shall be the same the existing method. All steel truss members shall be prepared and coated as described in the Specifications and as completed on the exposed steel in Digester No. 1.
2. Replacement of truss cross bracing with Type 316 stainless steel, sized to match the existing members. Fastening of the new bracing to the existing trusses shall be the same as the existing method. Coating of the cross bracing is not required. The remaining plain steel truss members and welds shall be prepared and coated as described in the Detailed Specifications and as completed on the exposed steel in Digester No. 1.
3. Completion of either Option 1 or 2 above by removal of the cover from the digester. The cover must be supported properly for safe removal of the structure and to prevent damage and racking. After the repairs and coating is complete, the cover shall be reinstalled on the digester and placed back into service.
4. Completion of either Option 1 or 2 above without removal of the cover from the digester. The cover shall be left in place and scaffolding assembled within the digester to properly and safely perform the truss repairs. Upon completion, the scaffolding shall be removed and the digester placed back into service.

Also, I know we still have to clear up the remaining questions from Pieper about the mixing pump pressure sensors and controls. Our electrical engineer comes back from vacation on Monday. I will send out a request for a teleconference to everyone so we can discuss this. Pieper does have the new sensors back now, correct?

Please let me know if you have any questions, and I'll be watching for your response. Village staff would like to have the remaining work of this contract completed as quickly as possible.

Thank you,

Diane

Diane L. Thoune, P.E.

Clark Dietz, Inc. - Engineers
5017 Green Bay Road, Suite 126
Kenosha, WI 53144
262.657.1550 - office
262.657.1594 - fax
diane.thoune@clarkdietz.com
www.clarkdietz.com

Please consider the environment before printing this e-mail.

QUOTE

N7295 Winnebago Drive Fond du Lac, WI 54935
920-904-5579
doug@sabelmechanical.com

DATE: 6/15/15

QUOTE #:

SEND TO
Village of Jackson Jackson WWTP

Date	Job	Payment Term	QUOTE EXPIRES
6/15/15	Remove Digester Cover	30 DAYS	30 DAYS

QTY	DESCRIPTION	UNIT PRICE	LINE TOTAL
	Sabel Mechanical LLC will supply labor, materials and equipment to remove the digester cover and place in parking lot. Sabel Mechanical LLC will supply labor to remove and replace 32 existing cross brace members per Walker Process Equipment for the Digester #2. After Cover is painted, Sabel Mechanical LLC will reinstall cover on digester.		$69,334.00
	Porta Painting Quote #34788		$59,750.00
	Profit and Overhead		$12,908.40
		SUBTOTAL	$
		SALES TAX	$
		TOTAL	$141,992.00

portapainting

Porta-Painting, Inc. - 313 Travis Lane - Waukesha, WI 53189 - **ph** (262)-970-9713 - **fax** (262)-970-9723 - **email** john.a@portapainting.com

June 3, 2015

QUOTE #34788

Attn: Mark Grebe
Sabel Mechanical
Email: mark@sabelmechanical.com

Subject: Jackson WWTP Digester #2 35' diameter cover interior

Scope:

- GC will remove cover from tank and place on timbers on asphalt. Timbers must be high enough to allow for access under cover. We must have sufficient room for staging our compressors and media hopper next to cover.
- We will erect scaffold towers under cover to allow us access to surface.
- First abrasive blast will be perimeter of 8 trusses to allow for removal of cross bracing and re-welding of new steel cross bracing.
- Abrasive blast trusses, underside of cover, gas dome, interior and exterior side of skirt to an SSPC-SP 10 finish with a 1.5 to 2 mil profile. Blow down surfaces.
- Vacuum up media. Media will be tested and disposal will be in a licensed landfill.
- Spray 1 prime coat Tnemec Series 120 Vinester 5002 at 12-18 mils DFT on blasted surfaces.
- Spray 1 coat Series 120 on welds.
- Spray 1 finish coat Series 120 Vinester 5001 at 12-18 mils DFT.

Total Base Bid: $59,750.00

Optional Deduct: $7,400.00 to apply 1 coat Tnemec Series 69 primer and 1 coat Series 46 coal tar epoxy at 16-20 mils DFT instead of Series 120.

Surface temperature of steel must be at least 60 degrees for application of Series 120.

Notes:

- Work will be done first shift Monday – Friday.
- Owner will provide all power requirements.
- We are assuming existing coating is non-hazardous and does not contain any heavy metals.

Exclude:

- Blasting and painting steel roller column above cover skirt.
- Dehumidification equipment.
- Dust control during blasting.
- Hazardous media disposal.

Valid until July 3, 2015
TERMS: Net 30, Exhibit A
Building Contractor Registration Number 1096244

Visit our new website at: www.portapainting.com

Thank you for allowing us to quote on your requirements.
Exhibit A of Terms and Conditions is included
Sales tax for personal property is not included.

By: John Andritsch _____
John Andritsch, Project Manager/Estimator

This quote is accepted including Exhibit A.

By _____

Title _____

Date _____

Exhibit A
PORTA-PAINTING, INC. TERMS AND CONDITIONS

Porta-Painting's Proposal is expressly conditioned upon Customer's unconditional acceptance of the following Terms and Conditions:

1. **Acceptance.** This proposal constitutes a binding agreement ("Agreement") when signed by Customer's duly authorized representative, which Agreement is expressly conditioned upon and limited to the terms set forth herein. Any additional terms are void unless accepted in writing by Porta-Painting.
2. **Sequencing.** This proposal is based upon proper sequencing per PDCA Standard P7-99. Work performed out of sequence will effect the cost of Porta-Painting performing our work. These additional costs will be passed on to the Customer.
3. **Payment.** Customer shall pay Porta-Painting within thirty (30) days after receipt of Porta-Painting's invoice. Customer shall be liable for expenses, including attorneys fees and costs, incurred by Porta-Painting in connection with any action taken to collect payments due from Customer.
4. **Changes.** If any changes in the work requested by Customer cause an increase or decrease in the cost or time required for the performance, an equitable adjustment shall be made and this Order shall be modified in writing accordingly.
5. **Warranty.** Porta-Painting warrants that the materials and workmanship provided by it shall be free of defects and shall conform to the description and specifications described in this Agreement and any specifications and drawings incorporated by reference herein. **All other warranties, express or implied, including any warranties of merchantability or fitness for a particular purpose are excluded.**
6. **Delay Damages.** Porta-Painting shall not be liable for damages delays occasioned by causes beyond its control, including but not limited to the action or failure to act by others, fire, act of God, or unusually severe weather. Porta-Painting is not responsible for any indirect expenses, overhead, incidental or consequential damages of Customer under any circumstances as a result of such delays.
7. **Termination.** Porta-Painting may terminate this Agreement or any part thereof for cause in the event Customer fails to comply with any of its terms and conditions. In the event of termination for cause Customer shall be liable to, indemnify and hold harmless Porta-Painting against any and all damages, including attorneys fees, sustained by reason thereof.
8. **Assignment.** No part of this Agreement may be assigned or without the written approval of Porta-Painting.
9. **Waiver.** Porta-Painting's failure to insist on performance of any of the terms or conditions of this Agreement or to exercise any rights or privileges or Porta-Painting's waiver any Customer breach shall not thereafter waive any other terms, conditions or privileges, whether of the same or similar type.
10. **Modification of Agreement.** This Agreement, including the terms and conditions, constitutes the complete provisions of the parties' contract. No prior written or oral representation shall in any way modify these terms and conditions. In addition, Customer expressly agrees that any modification of this Order will only be effective if agreed to by Porta-Painting in writing.
11. **Entire Agreement.** This document represents the ENTIRE AGREEMENT between the parties. All representations and warranties, whether oral or written, regarding the subject matter of this Agreement are contained herein. All prior and contemporaneous conversations, negotiations, possible representations and warranties with respect to the subject matter hereof are waived and superseded by this Agreement.
12. **PDCA Standards.** Painting and Decorating Contractors of America Standards P1-92 and P4-94 are incorporated herein by reference.
13. **Insurance.** Customer agrees to pay for the costs of any insurance coverage beyond that normally carried by Porta-Painting. Any provision of this Agreement to the contrary notwithstanding, Port-Painting shall not provide waivers of subrogation, indemnification against the negligence of others, primary coverage under its liability polices for additional named insureds, if any, nor limit its liability under workers' compensation acts, disability benefit acts or other employee benefit acts by indemnification or otherwise.
14. **Legality of Terms.** If any provision in these Terms and Conditions is stricken or deemed illegal, the remaining terms shall remain in full force and effect.
15. **Jurisdiction and Venue.** Wisconsin law shall apply to interpret and govern this Agreement and these Terms and Conditions, as well as all disputes arising out of them. Venue of any disputes regarding this Agreement shall be in Milwaukee County, Wisconsin. Further, by accepting this proposal, Customer agrees to be subject to personal jurisdiction in the State of Wisconsin.
16. **Dispute Resolution.** Disputes relating in any way to this Agreement shall be settled by arbitration conducted by the American Arbitration Association (AAA) in accordance with its Construction Industry rules and procedures, except only that a single arbitrator shall be used. The decision of the arbitrator shall be final and binding with respect to all matters submitted to arbitration, shall be enforceable in accordance with the provisions of the Wisconsin Arbitration Act and attorney's fees shall be awarded to the prevailing party in the arbitration.
17. **Backcharges.** The following conditions must be met before a backcharge will be accepted: Porta-Painting must be notified within 5 business days of the occurrence. Indisputable evidence that the damage was done solely by Porta-Painting's employees or Porta-Painting's subcontractor must be present. Porta-Painting will be directly involved in the negotiation to remedy the situation and agree on a dollar value prior to the repair being completed.
18. **Prime Contracts.** Prime Contracts incorporated solely by the contract language of the General Contractor 's contract documents shall be excluded unless written copy of the Prime Contract is provided with contract documents from the General Contractor. Upon receipt and review of the Prime Contract documents, bid may be withdrawn or extra costs assessed based on the additional burden placed on Porta-Painting by the Prime Contract.
19. **Disposal.** Porta-Painting will gather all debris and place into dumpster provided by owner. Porta-Painting will remove all solvents used for cleaning equipment and unopened untinted materials. All open and/or tinted materials will be left with owner.

(rev 5-06)

MEMO

To: Brian Kober, P.E.
From: Diane Thoune, P.E.
Date: May 27, 2015
Subject: Jackson WWTP Digester Improvements – Digester #2 Inspection
Copies: Jeff Deitsch

On May 21st I completed an inspection of Digester #2 at the Jackson WWTP with Jeff Deitsch. This inspection was conducted to review the structural condition of the cover. Inspections by Sabel Mechanical and plant operators revealed significant deterioration of some of the cover's structural supports. Jeff stated that they are considering replacing the cross bracing in each truss with new stainless steel members. The main truss beams will remain in place and be blasted and coated.

I entered the digester through the access hatch and visually inspected the cover supports from a ladder. Pictures from my inspection are shown below. The digester structure had already been cleaned and painted. The digester cover's sidewalls, ceiling, and main truss members appear to be in good condition. As shown below, the cross bracing on each of the cover trusses is in very poor condition. The members show significant deterioration. It appears that the beams are not continuous in some locations.

I shared the inspection photos with our structural engineer. He stated that with the main members in good condition, blasting and painting is appropriate, as is using stainless steel for the cross bracing. It appears that the existing connections are welded, and stainless steel is typically easily welded to plain steel. If the existing connections are bolted, welding new connections is acceptable, or bolt with Type 316 stainless steel fasteners according to ASTM F593. If the new cross bracing is to be welded to the existing steel, the welds should also be painted. Another option is to install the stainless steel bracing and then paint everything including the stainless steel, provided the stainless steel surface has been prepared to receive paint. This will allow the welds to be coated seamlessly. If the stainless steel is not going to be painted, we recommend using Type 316 within the digester. If the stainless members are being painted along with the rest of the steel, Type 304 will be suitable.

Since the rest of the cover and frame are painted plain steel, however, stainless steel may not be the most advantageous option. It may be more cost effective to use plain steel with thicker angles than was originally used for the bracing. For example, if the existing angles were 3/16 or 1/4 thick, use 3/8 thick angles instead and paint those along with the rest of the steel. The thicker material will still be significantly less expensive than the stainless steel. We recommend the Village obtains two quotes from Sabel, one for replacing the cross bracing with unpainted Type 316 stainless steel, and one for using plain steel and painting the cross bracing along with the rest of the cover.

Jeff also pointed out several bubbles in the roof surface. He was informed by the contractor that the bubbles will be removed and replaced after the repairs are made to the cover and it is put back in place.

June 25, 2015

Mr. Brian Kober, P.E.
Director of Public Works
Village of Jackson
N168 W20733 Main St
Jackson WI 53037

RE: Water Master Plan Update

Dear Brian,

We appreciate the opportunity to propose on the professional services contract for updating the Water Utility's Master Plan. The addition of the Town of Jackson water main extension recently completed, was not included in the 2007 Water Utility Master Plan. The Master Plan update will incorporate this addition, and re-evaluate the current state of the Utility. This will allow the Utility to meet the long term goals and objectives of the Village. Included in this proposal is our scope of services and proposed fee for this project.

If you have any questions or comments regarding this proposal please call me at 414.559.6883.

Sincerely,
City Water, LLC.

Thomas Nennig, P.E.
Project Manager

SCOPE OF SERVICES

Task

1. Update Utility Water Hydraulic Model
    a. Verify additions to the model from recent Town of Jackson water main extension
    b. Update model to include any water main additions, and relay projects in the Village

2. Update Water Demand
    a. Update water demand based on PSC annual reports. Demands will be used to develop detailed water usage by location, and customer class for the model

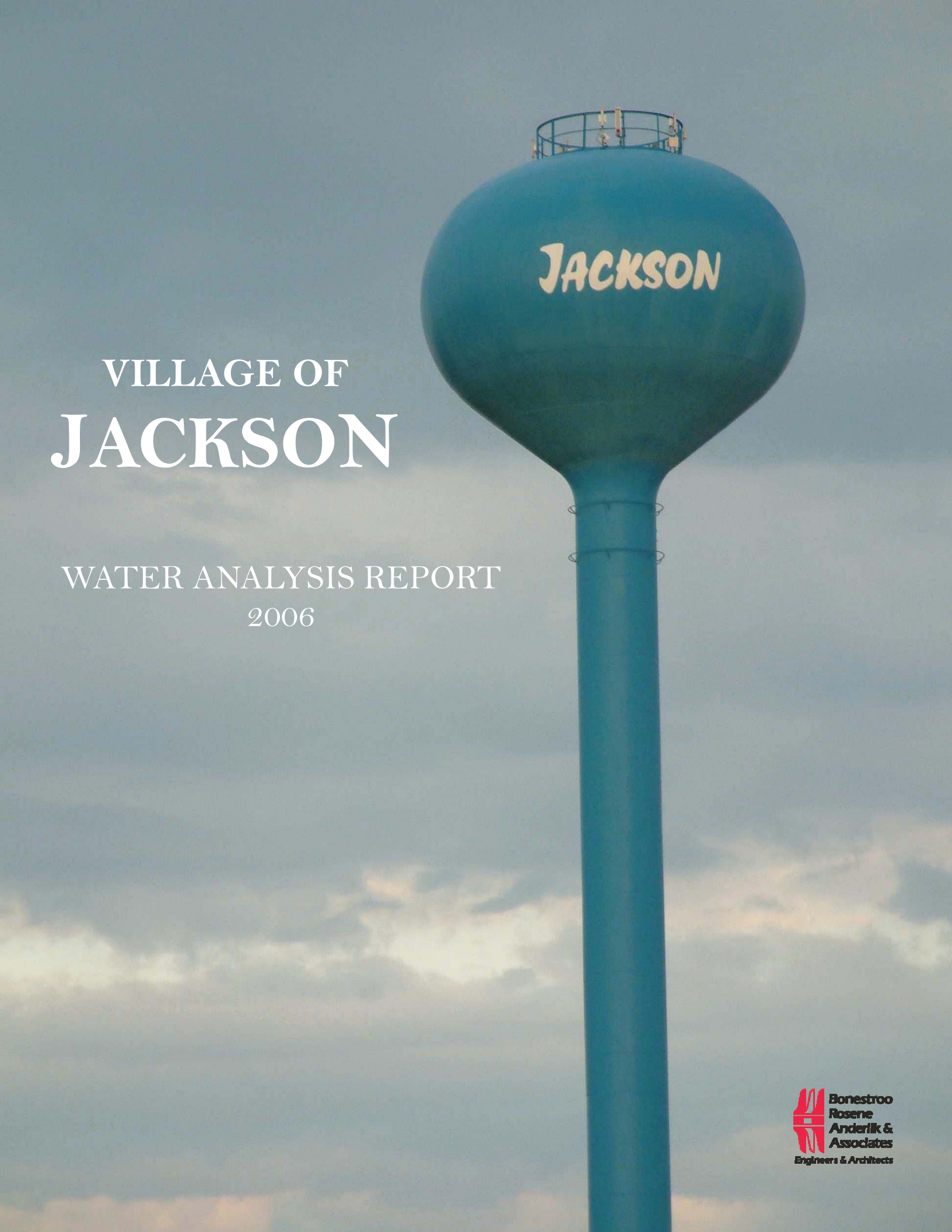
3. Field Testing
    a. We will work with the Village in conducting field flow tests to be used to update the calibration of the model. SCADA data will also be used to help calibrate the model. The model will be calibrated to within industry standards.

4. System Analysis
    a. After model calibration is complete a fire flow analysis will be conducted for the entire distribution system.
    b. Any deficiencies in system static pressure or available fire flow volume will be reported along with recommended improvements.
    c. Analysis will also be conducted for maximum day and peak hour demand conditions to identify and deficiencies in system operation

5. Update Master Plan
    a. Using the updated projected growth pattern and the new service territory, we will update the master plan for the water supply and distribution system for the Village.

FEES

We are offering reasonable professional rates and a strong commitment to deliver COST-EFFECTIVE services to satisfy your requirements for this project. Our proposed fee is $9,850.



VILLAGE OF JACKSON

WATER ANALYSIS REPORT
2006

Bonestroo
Rosene
Anderlik &
Associates
Engineers & Architects

Bonestroo
Rosene
Anderlik &
Associates
Engineers & Architects

12075 North Corporate Parkway, Suite 200 ▪ Mequon, WI 53092
Office: 262-241-4466 • Fax: 262-241-4901
www.bonestroo.com

October 20, 2006

Brian Kober, P.E.
Director of Public Works
Village of Jackson
N168 W20733 Main St.
Jackson, WI 53037

RE: Water Analysis Plan
Bonestroo Project 000841-05119

Dear Brian:

Thank you for the opportunity to perform the Water Analysis Plan for the Village of Jackson. We are furnishing a report of the plan for your use.

Our report includes sections on:

- Water Demands
- Analysis of Existing Distribution System
- Proposed Facilities
- Capital Improvement Plan

The report is a result of our hands-on analysis. It also contains constructive ideas from your own staff. The report should be used as a planning tool for management and staff..

We greatly appreciate the time and cooperation of Village staff in helping us complete this report. Please call us anytime if you have comments and input to the report.

Sincerely,
Bonestroo, Rosene, Anderlik & Associates, Inc.

Tom

Thomas Nennig, P.E.

I hereby certify that this plan and specifications for all Divisions were prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Wisconsin.

Thomas

Thomas S. Nennig, P.E.

Date: 10-20-06 Reg. No. E-34953

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CHAPTER 1- INTRODUCTION

1.1 Background

The Village of Jackson is a community of approximately 5,900 people located in Washington County. The Village is located approximately 15 miles North of Milwaukee and is considered one of the fastest growing communities in Washington County. The Jackson Water Utility provides water service to the residences and businesses within the Village limits, the Town of Jackson, Washington County Fair Grounds and the new St. Joseph's Hospital in the Town of Polk.

The Village's water system consists of two pressure districts that are supplied water from five groundwater wells, two elevated water storage tanks, one booster station and a hydro-pneumatic pressure tank system at the County Fair grounds. The distribution systems contains approximately 34 miles of transmission main and distribution watermains, ranging in size from 4-inch to 16-inch.

The customers of the Village's Water Utility include 3 major industrial users, an area hospital, along with smaller industrial and numerous commercial and residential users. Approximately 48% of the amount of water sold in the Village is attributed to residential customers.

The Village of Jackson's location with respect to the greater metro area, and a principal transportation corridor offers significant potential for continued growth and development within the Village's water and sewer service area. Therefore, proper planning is critical to coordinate the proper expansion of the Village's water system facilities for short-term and long-term needs of the Village.

1.2 Purpose & Objectives

As the Village expands to new service areas and the current service area continues to develop, it is necessary to update the water distribution plan. In particular, it is necessary to develop a water system plan for the entire service area for the Village based on their Land Use Plan. Specific Objectives include:

- Determine the potential water demands expected within the defined study area (Figure 1-1) as defined by SEWRPC, and the production and storage capacity required to meet those demands.
- Develop a proposed transmission main system to serve the outlining areas of the Village
- Determine the boundary line for the high and low pressure service districts
- Determine short-term and long-term supply and storage needs in order to allow sufficient lead time for the addition of the facilities to the system.
- Hydraulically analyze the existing and future system to identify system deficiencies and propose solutions to ensure adequate residual pressures.
- Develop preliminary cost estimates for supply, storage, and distribution facilities to form a basis for a satisfactory financing program.
- Provide capacities and locations of proposed new water storage facilities

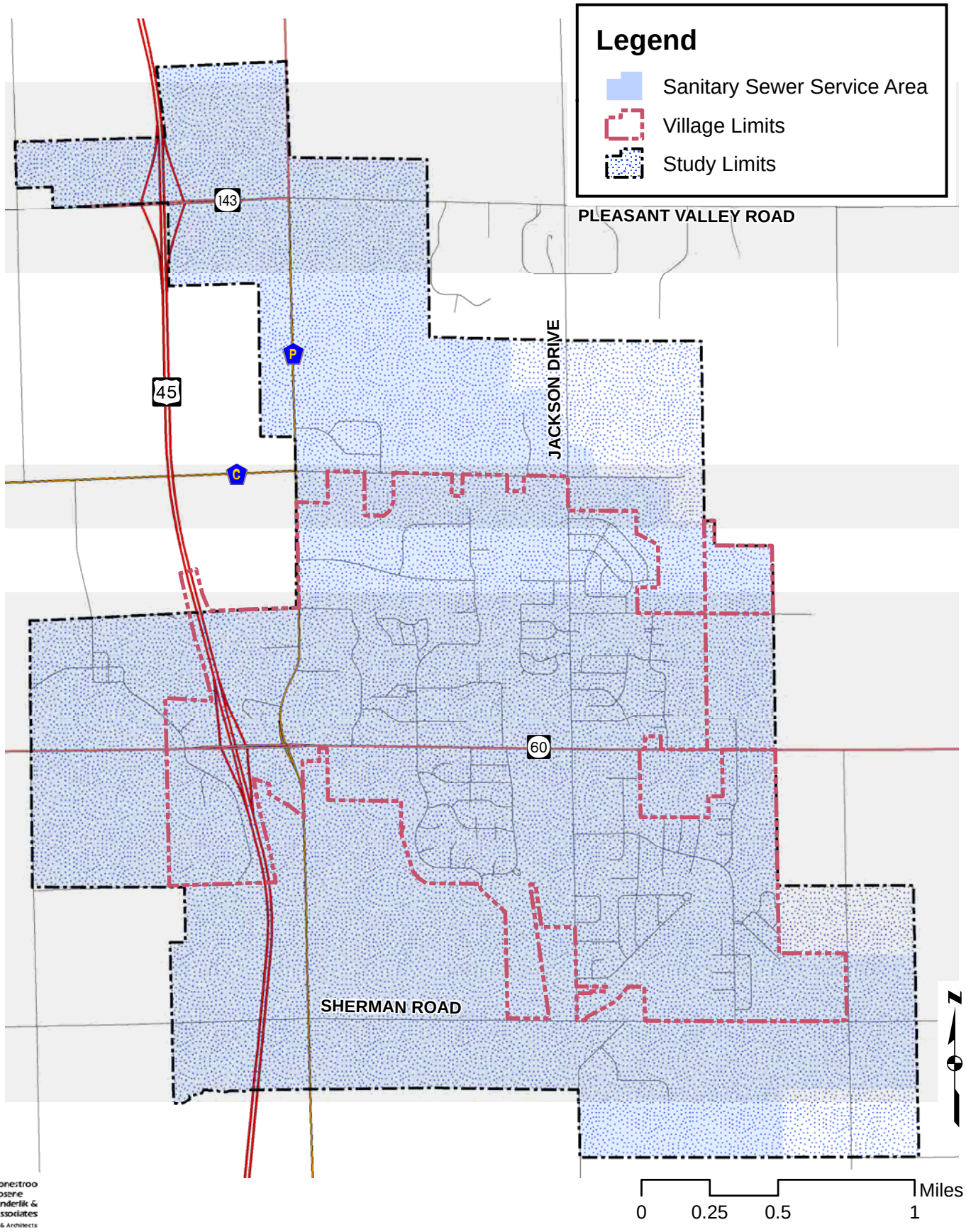
1.3 Scope

The planning approach used for the study began with an evaluation of the existing distribution facilities and defining the future service area for the Village. The future service area was evaluated over a planning period extending beyond 2025.

Population, community growth, historical and projected water demands served as the basis for evaluating and developing future improvements to the distribution system. The results from the Revenue Sharing Agreement and Cooperative Boundary Plan (2005) completed jointly by the Village and Town of Jackson and South Eastern Wisconsin Regional Planning Commission (SEWRPC) were used in forecasting the future growth of the distribution system. Future water needs were based on the project growth of the system and identified in Chapter 2.

Map Document: (N:\841\84105119\Cad\GIS\mxd_projects\Study Limits 8-5 x 11.mxd)
4/24/2006 -- EOJ

Figure 1-1
Study Limits



Bonestroo Rosene Anderlik & Associates
Engineers & Architects

CHAPTER 2 – WATER DEMANDS

2.1 General

Capacity requirements for the three water system components of supply, storage, and distribution are dictated by the demands placed upon them for production and distribution. The design of the water supply and distribution system for the Village was based on estimates of the projected water demands. Phasing of the system improvements was based on estimates of short-term needs.

Water demand (both peak and average) is affected by many factors including population, population distribution, commercial and industrial activity, water quality, water rates, climate, soil conditions, economic level of the community, sewer availability, water pressures and the condition of the water system. The most important factor is land usage, which encompasses residential and non-residential development. The water demand rates used in this plan are shown in Table 2-2.

Projections of 2025 land usage and population for the Village were correlated with past and present water demands to develop estimates for 2025 water demands in the service area. Water use records through 2004 were used as the basis for the new water demand computations contained in this report.

2.2 Relationship to Land Use Plan and Population Forecasts

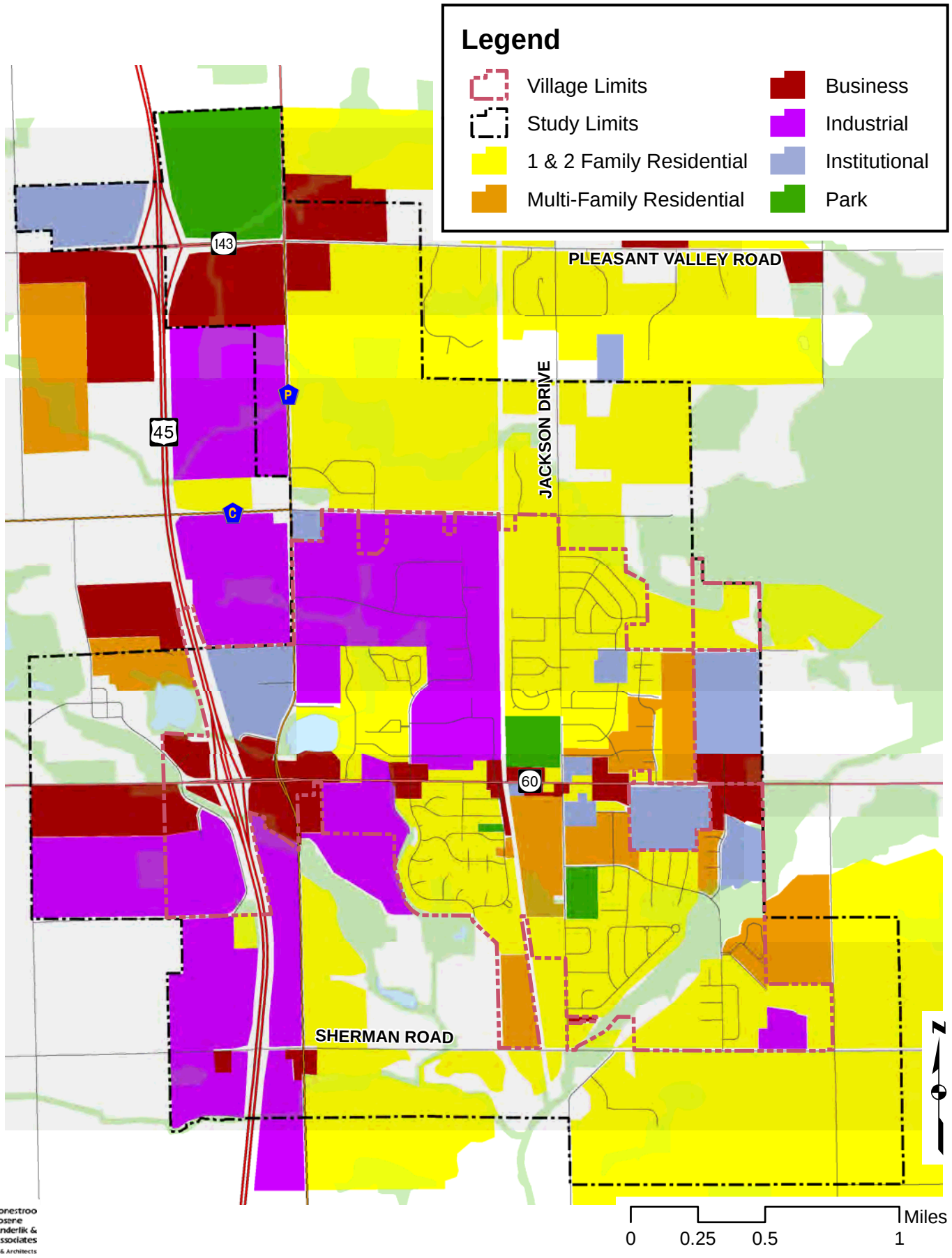
The Water Supply and Distribution Plan was prepared based on the Proposed Land Use Plan for the Village contained in the 2005 Revenue Sharing Agreement and the household and population forecasts from SEWRPC. The future land use plan is shown on Figure 2-1.

Population projections and water use forecasts were developed for 2010, 2015, 2020, and 2025, by taking the net developable acres of developable land (as shown in Table 2-1) and multiplying by the appropriate factors in Table 2-2. The facilities described in this plan are designed to serve an ultimate population of 10,400. Actual growth rates will affect only the

timing of construction and not the actual design of the system. Table 2-3 summarizes the estimated total and served population projections used for this study.

Map Document: (N:\841\84105119\Cad\GIS\mxd_projects\Future Land Use 8-5 x 11.mxd)
4/24/2006 -- EOJ

Figure 2-1
Generalized Proposed Land Use



Bonestroo Rosene Anderlik & Associates
Engineers & Architects

The estimated total population for the study area was developed from demographic information provided by SEWRPC. Demographic information is provided in Appendix B.

Table 2-1 - Land Use Summary

Land Use Type	Acres	Percentage
Developed - Not served (existing residential served by private wells)	176	8%
Developable Untilled Land	76	3%
Residential (Includes Rural, Single Family, Suburban)	534	23%
Total Residential	786	34%
Commercial	38	2%
Industrial	163	7%
Government / Institutional	26	1%
Park/Recreation/Golf	174	8%
Undevelopable	1,131	49%

Table 2-2 - Future Water Demand Rates

Land Use Type	Persons/ Dwelling	Gallons/ Capita/ Day	Units/ Acre	Demand Rate (GPM/Acre)		
				Average Day	Maximum Day	Peak Hour
Residential	3	90	3	0.5625	1.125	2.25
Commercial	-	1500 gpd per acre	-	1.04	1.56	3.12
Government/ Institutional	-	1500 gpd per acre	-	1.04	1.56	3.12
Park/ Rec/ Golf	-	500 gpd per acre	-	0.35	1.04	2.08

Table 2-3 - Total and Served Population Projections

Year	Study Area Estimated Total Population - SEWRPC	Estimated Served Population
2005	7,075	5,884
2010	7,866	8,920
2015	8,657	9,872
2020	9,448	10,000
2025	10,239	10,400

2.3 Variations in Water Usage

The rate of water consumption will vary over a wide range during different periods of the year and during different hours of the day. Several characteristic demand periods are recognized as being critical factors in the design and operation of a water system. The demand rates are expressed in million gallons per day (MGD), which in the case of a daily demand indicates the total amount of water pumped in a 24 hour period. Hourly rates are also expressed in million gallons per day. In the case of an hourly rate, the rate in MGD is determined by assuming that the pumpage would continue at the indicated rate for 24 hours.

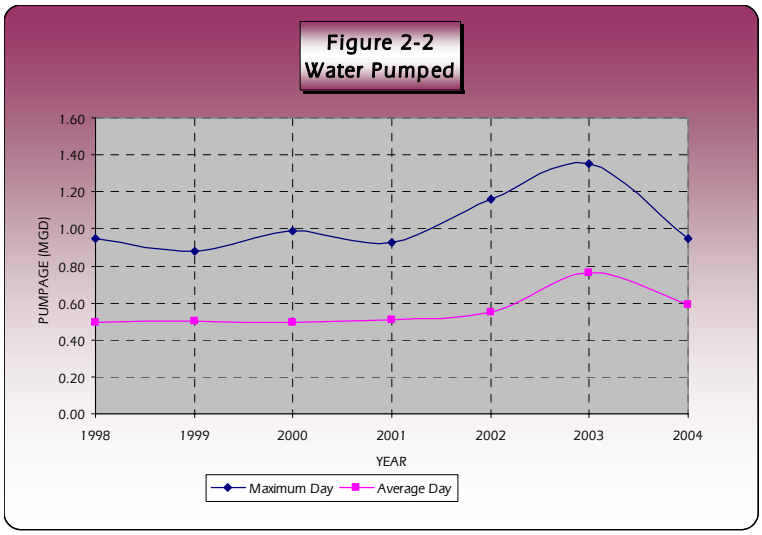
The **average day demand** is equal to the total annual pumpage divided by the number of days in the year. The principal significance of the average day demand is to aid in estimating maximum day and maximum hour demands. The average day demand is also used in estimating future revenues and operating costs such as power and chemical requirements, since these items are determined primarily by the total annual water requirements rather than by daily or hourly rates of usage. Pumping records, which were used in determining average day demands, are presented in Appendix C.

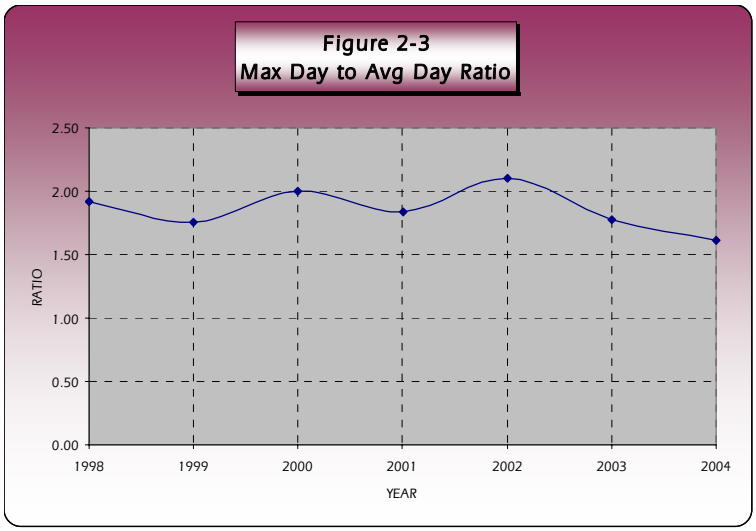
The **maximum day demand** is the critical factor in the design of certain elements of the waterworks system. The principal items affected by the maximum day demand are:

- Groundwater water supply facilities, and
- Water storage requirements.

The groundwater water supply facilities must be adequate to supply water greater than the maximum day demand rate with the largest groundwater supply well out of service. Sufficient water storage should be provided to meet hourly demands in excess of the water supply capacity. The installed capacities should also include reserves for growth, industrial development and fire protection.

The maximum demands upon the water system are encountered during short periods of time, usually on days of maximum consumption. These short period demands are referred to as hourly demands, and they seldom extend over a period of more than three or four hours, generally during hot summer evenings when the sprinkling load is the highest. The Village's maximum day occurred in 2003 at 1.35 MGD. However, the Village had experienced an unusually high amount of water pumped starting at the end of 2002 to the beginning of 2004 due to an undetected leak in the distribution system. The leak was repaired in February of 2004 and the pumpage significantly declined. Therefore, the maximum day demand used for analysis in this report occurred in 2002, at 1.16 MGD. Total water pumped for the past seven years is shown in Figure 2-2. The **demand variations** for the maximum day, maximum month, and minimum month expressed as a percent of the average day demands are shown in Appendix C for the past seven years. The maximum day to average day ratio has been between 1.6 and 2.1 with an average of 1.86 as shown in Figure 2-3.





The **maximum hour** consumption rates impose critical demands on the distribution system, and major elements of the waterworks facilities must be designed to

meet these demands and provide satisfactory service at all times.

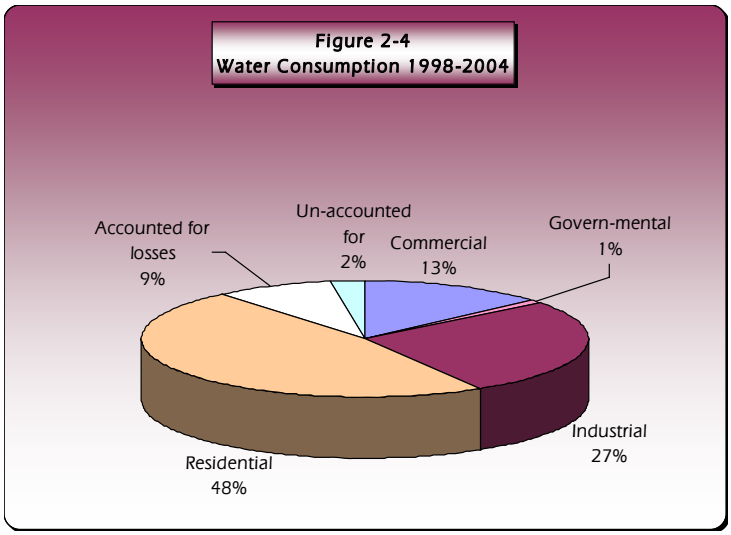
Maximum hour demands in Jackson are supplied through a combination of water from the well pumps, and water drawn from storage facilities in the distribution system. Although the rate of consumption is high during periods of maximum hourly demands, the duration of the extreme rate is relatively short. Therefore, a moderate quantity of water withdrawn from storage facilities strategically located in the system assures satisfactory service, minimizes the total maximum hour pumping and transmission main capacity required, and permits more uniform and economical operation of the pumping facilities. Storage in the system is also an important factor in insuring reliability of water service during emergencies resulting from power failure, temporary outages of water supply facilities, and sudden and unusual demands brought about by fires or line breaks.

In the Village of Jackson, where the distances from the water supply sources to the storage facilities are considerable, another critical situation must be evaluated in designing the system. Storage tanks are refilled during the night and early morning hours when demand on the system is low. A strong network of piping is needed between the supply sources and the reservoirs to insure that a sufficient amount of water can reach the storage tanks during the refilling period to provide the required supply for the following day.

The connected residential population, water usage, residential water usage, and total population served by the Village of Jackson was used to determine the **per capita water use** for the past seven years as shown in Appendix C. The total per capita water use has ranged from 98 gallons per capita per day (gpcd) to 138 gpcd. The per capita water use on the maximum day varied from 166 gpcd to 245 gpcd during the same period.

2.4 Water Demand by Customer Category

Analysis of past water usage by customer category provides additional insight into how water is being used in the Village, and where potential for conserving water may



be found. Figure 2-4 illustrates the Village water consumption is 48% Residential, 27% Industrial, 13% Commercial, 9% accounted for loses, 2% unaccounted for water, and 1% for governmental.

2.5 Projected Water Usage

Estimated future water usage is based on population, land use, and water use trends. Peak demands vary with land use. High peak usage rates are experienced in low density areas during hot, dry periods due to extensive lawn sprinkling, while usage in high density areas depends on human consumption to a greater extent. Average daily usage for commercial and industrial areas is very high, but is much more stable than residential usage. Therefore, although commercial and industrial areas have high average usage, the peak usage (maximum day and maximum hour demands) is comparable to those in residential areas.

Each of the land use categories was examined with consideration given to population density, area of lawns to be sprinkled and other activities likely to occur compatible with the projected land usage. Demand rates were then developed for each land use type.
Total water usage at designated discrete points of demand on the water system was determined for the purpose of hydraulic analysis and system design. This was accomplished by dividing the Village into subareas whose total demand was assumed to be located at a designated point in each subarea. The subareas were then further subdivided into the various land use categories, based on the Land Use Plan. By applying the unit demand identified in Chapter 2, the total demand for each subarea was developed.

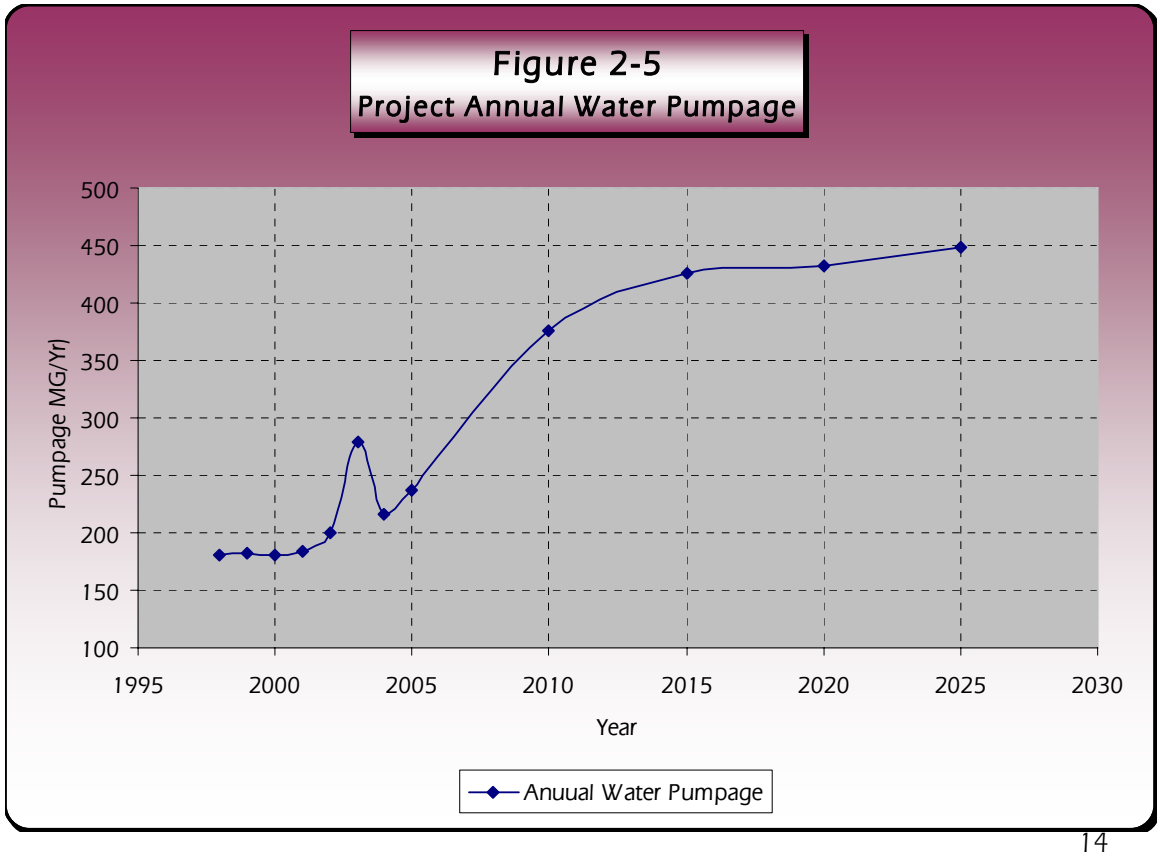
Projected average and maximum day water demands are presented in Table 2-4. The maximum day water demands are used for the sizing of supply facilities. A record of actual maximum and average day demands should be charted to aid in the sizing and phasing of future water supply facilities. The maximum day demand at full development of the study area is estimated to be 2.29 MGD as shown in Figure 2-5.

The estimated water demands used to design the plan are slightly higher to provide flexibility in meeting the Village's needs in the future. The plan has the following built-in assumptions.

- **Commercial/Industrial Water Use:** The water use for any property can vary widely depending on their specific process, employment base, ability to recycle water, etc. Therefore, this report assumes an average water use of 1,500 gallons per day per acre for Industrial and Commercial land use.
- **Service to HWY 45 Corridor:** The plan assumes that ultimately Jackson will provide water service to the Area West of the HWY 45 corridor.

Table 2-4 - Projected Avg. Day & Max. Day Demands

Year	Served Population (Estimated)	Max. Day Per Capita Demand (gpcd)	Average Day Demand (MGD)	Maximum Day Demand (MGD)
2000	4,998	197	0.49	0.99
2005	5,884	205	0.65	1.21
2010	8,920	215	1.03	1.92
2015	9,872	220	1.17	2.17
2020	10,000	220	1.18	2.20
2025	10,400	220	1.23	2.29



2.6 Fire Demand

Water usage for fire demand is also a vital consideration in the design of a water supply and distribution system. Fire demand varies greatly from normal usage in that an extremely large quantity of water is required from a single demand point in a very short time. The quantity of water used for fires is almost negligible when compared to other usage categories, but because of the extreme rate of usage during an emergency situation, fire demands frequently govern design.

The Insurance Services Office (ISO) recommends that a system the size of Jackson's be capable of delivering a fire demand of 1000 GPM to 3500 GPM for varying durations depending on the rate of demand. A fire demand of 3500 GPM sustained for a period of three hours was incorporated into the design of Jackson's water system. Table 2-5 shows the fire flows used in the design of the Jackson water system. The ability of the Village's water system to meet fire demand is one of the three major components which are used to determine a rating for insurance. The other two components are building/fire codes and characteristics of the fire department. Each is used almost equally in determining an overall Village rating.

Table 2-5 Recommended Fire Flows

Land Use	Required Fire Flow (gpm)	Duration (hrs)
Commercial / Industrial	3500	3
Institutional / Public	3500	3
Residential	1000	2

2.7 Phasing of the System

For the purpose of phasing additions to the system, water demands for each year are determined by multiplying the demand rates by the appropriate acres of each land type expected to develop by that year. Based on these assumptions, the average day demand in the year 2025 is expected to be about 1.23 MGD with a corresponding maximum day demand of about 2.29 MGD.

CHAPTER 3 EXISTING FACILITIES

3.1 Water Supply

General

The water system operated and maintained by the Village of Jackson includes:

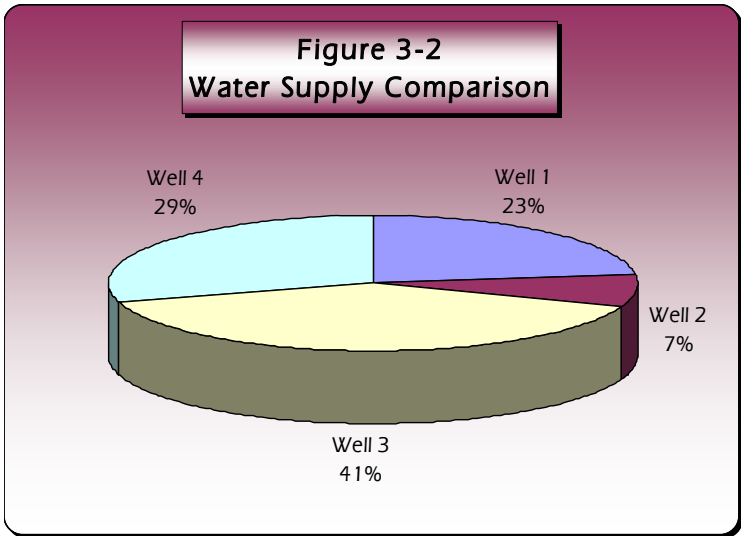
- 4 groundwater wells
- 2 elevated storage towers
- 1 high service booster station
- Water system controls located at Village Hall

A general location and layout of the water distribution system is illustrated in Figure 3-1. This chapter will discuss the operation characteristics of the existing distribution system.

Existing Wells

The Village of Jackson presently obtains its water supply from four municipal wells. The supply wells draw water from two primary aquifers, the shallow dolomite and sand and gravel aquifers. Both aquifers are highly susceptible to groundwater contamination due to their relatively shallow depth. Strict adherence to the wellhead protection plan established for each well is critical to the continued operation of each well.

All four of the existing wells are located in the low pressure district and contain a gas chlorine feed system for water disinfection purposes. The well capacities range from approximately 75 gpm to 1,100 gpm. The constructed depths of the wells range from 260 to 457 feet. Specific capacities for each well range from approximately 2.8 to 72 gpm per foot of drawdown. Figure 3-2 summarizes the production of water supplied from each well between 1998- 2004 for the Village of Jackson. Detailed well data is found in Appendix D. There is a fifth municipal well that is currently under construction that will provide the



Map Document: (N:\841\84105119\Cad\GIS\mxd_projects\Existing Distribution System 22 x 34.mxd)
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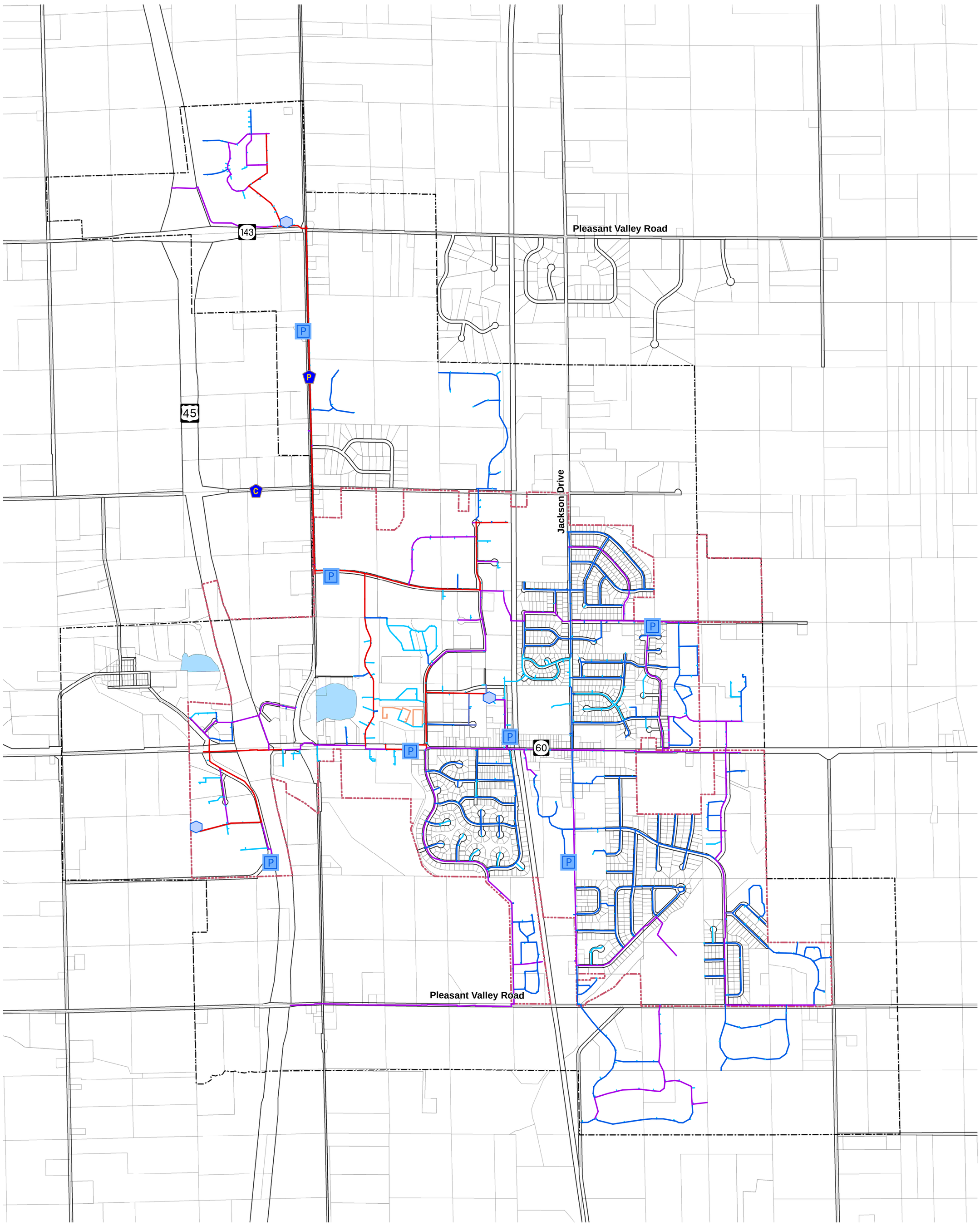
Figure 3-1
Existing Distribution System



Legend

- Pumps
- Tanks

Pipes

- 4" Diameter Pipe
- 6" Diameter Pipe
- 8" Diameter Pipe
- 10" Diameter Pipe
- 12" Diameter Pipe
- 16" Diameter Pipe
- Village Limits
- Study Limits

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0 500 1,000 2,000 3,000 Feet

N

Village with an additional 1,000 gpm of capacity. Once the new well is operational, the Village is planning on abandoning well 2 and converting the old Cranberry Creek well to a sixth municipal well.

Center Street (Well 1)

Well 1 is located on North Center Street, north of Main Street. The well was constructed in 1949 to a total depth of 260 feet. The well contains a 14-inch diameter outer casing to a depth of 20 feet and a 10-inch diameter inner casing to a depth of 117 feet. The well pump was recently replaced in 2005. The new well pump is rated at 370 gpm. The current static water level of the well is approximately 70 feet. In 2004, Well 1 contributed approximately 25% of the water delivered to the Village.

Main Street (Well 2)

Well 2 is located south of Main Street and west of Glen Brooke Road. The well was constructed in 1968 and backfilled with pea gravel up to a depth of 287 feet. The well was later backfilled with neat cement grout in 1990 from 287 feet to 272 feet. The well contains a multiple casing combination consisting of 24, 16, and 10-inch diameter casings. The 10-inch inner casing extends to a depth of 171feet. The designed capacity of the well was 300 gpm however, recently the Village has experienced large amounts of sand being pumped when the well was operated. Therefore, the pumping capacity of Well 2 has been reduced to approximately 68 gpm to avoid pumping sand into the distribution system. The well operates under an artesian head. Specific capacity of the well is 2.8 gpm per foot of drawdown. In 2004, Well 2 has contributed only 4% of the water delivered to the Village.

Highland Drive (Well 3)

Well 3 is located on Ridgeway Dive and Highland Road. The well was constructed in 1979 to a total depth of 304 feet. The well contains a 20-inch diameter outer casing to a depth of 118 feet and a 14-inch diameter inner casing to a depth of 155 feet. The current static water level of the well is 10 feet. The capacity of the well pump is 900 gpm. The specific capacity of the well is 72 gpm per foot of drawdown. In 2004, Well 3 has contributed approximately 30% of the water delivered to the Village.

Cedar Parkway (Well 4)

Well 4 is located on Cedar Parkway in the Village's industrial park. The well was constructed in 1997 to a total depth of 457 feet. The well contains a 20-inch diameter outer casing to a depth

of 400 feet and a 14-inch diameter inner casing to a depth of 432 feet. The well is in the sand and gravel aquifer and operates under an artesian head. The capacity of the well pump is 1,200 gpm. The specific capacity of the well is 26 gpm per foot of drawdown. Well 4 has steadily improved since starting operation, and is currently supplying approximately 40% of the water delivered to the Village.

Northwest Passage (Well 5 – under construction)

Well 5 is located on Northwest Passage in the Village Business Park. The well was constructed in 2005 to a total depth of 215 feet. The well contains an 18-inch diameter casing to a depth of 175 feet, followed by 40 feet of screen that was developed with a natural gravel pack. The well is located in the sand and gravel aquifer and operates under an artesian head. The specific capacity of the well is 23 gpm per foot of drawdown. The well was test pumped over 1,200 gpm with approximately 60 feet of drawdown. The current design of the well pump is for 1,000 gpm.

The total combined capacity of all five wells is 3,538 gpm, or 5.0 MGD. The ***firm capacity*** (capacity available with the largest well out of service) is 2,338 gpm or 3.4 MGD.

Well Water Quality

The U.S. Environmental Protection Agency (EPA) has established national drinking water standards. These standards contain federally enforceable maximum contaminant level (MCL) standards for substances known to be hazardous to public health.

Water quality parameters are defined and regulated by two sets of standards - Primary and Secondary. Primary Standards are set for those substances known to be a hazard to public health. Secondary Standards are set for those substances that, although not hazardous to public health, frequently cause drinking water to have objectionable aesthetic qualities, such as taste and odor.

The water quality at the wells and in the distribution system is tested regularly to ensure that water quality is within the Primary and Secondary standards.

3.2 Storage

Maximum hour demands are supplied through a combination of water from the supply facilities and water drawn from storage reservoirs in the water distribution system. Although the rate of consumption is high during periods of maximum hourly demand, the duration of the extreme rate is relatively short. Therefore, a moderate quantity of water withdrawn from storage reservoirs strategically located in the system assures satisfactory service, minimizes the total maximum hour pumping and transmission main capacity required, and permits more uniform and economical operation of the system and pumping facilities.

Storage in the system is also an important factor in insuring reliability of service during emergencies resulting from loss of power, temporary outages of water supply facilities, and from sudden and unusual demands brought about by fire. The storage tends to stabilize the peaks in water demand and allows the system to produce water at a lower, more uniform rate.

The Village of Jackson currently has two elevated storage facilities located in the low pressure district, that have a combined capacity of 0.7 MG. Usable storage is defined as the storage available while still maintaining a sufficient residual pressure (within 40 ft. of the high water level). All of Jackson's storage can be considered usable. A summary of existing facilities is presented in Table 3-1. Both existing and proposed water storage locations are shown on the Water System map at the back of this report.

Table 3-1. Existing Storage Facilities

Storage Location	Type of Storage	HWL	Service Area	Usable Storage (MG)
West End	Elevated	1,065	Lower	0.5
Central	Elevated	1,065	Lower	0.2
Total				0.7

3.3 Distribution System

The existing water distribution system was primary constructed since the 1970's. The system consists of over 34 miles of watermain, varying in size from 4 to 16 inches in diameter as

shown on Figure 3-1 at the back of the report. The system also includes 1,150 valves, 515 fire hydrants, and 2,520 water meters. The existing system operates under two pressure districts, as shown on the map at the back of the report and discussed in the following paragraphs.

Lower Pressure District

The majority of the Village is in the low pressure district. The pressures in the low pressure district range from 40 to 100 psi and are controlled by the overflow elevation in both of the Village's elevated storage towers. The topographical service elevation for the low pressure district ranges between 840 and 965 feet.

High Pressure District

The high pressure district was developed to supply water to the County Grounds, and is now servicing water to the recently completed St. Joseph's Community Hospital in the Town of Polk. A booster station was constructed along CTH P in order to boost pressure to the high pressure district. A 2,000 hydro-pneumatic tank was installed on the corner of CTH P and the County Fair Grounds in order to maintain pressure in the high district when the booster pumps are not in operation. As the high pressure district continues to grow, the hydro-pneumatic tank will have to be replaced with a water storage facility. The high pressure booster station has a combination of booster pumps listed in Table 3-2.

Table 3-2. Booster Station Pumps

Pump Number	Horsepower (hp)	Total Dynamic Head (ft)	Capacity (gpm)
1	25	96	400
2	25	100	600
3	50	74	2100
4	50	74	2100

The firm capacity of the station is 3,100 gpm. The existing hydraulic grade line of the booster station is from 1,095 to 1,156, therefore the service range is from elevation 990 to 1,054. The booster station is equipped with a natural gas emergency stand-by generator in case of power failure. Currently, there is only one transmission main delivering water to the booster station. If this transmission main were to be taken out of service for maintenance or repair, there would not be water service to the high pressure district.

Water System Controls

The distribution system controls are located in the water superintendent's office inside Village Hall. The existing controls consist of a conventional telemetry control panel, allowing operators the ability to operate and control pumps, and monitor and trend elevated tank levels. Well pumps are automatically controlled by a pump selection matrix based on time of day and the water level in the elevated storage tanks. The elevated water tower in the business park serves as the primary control tower for the well pumps.

Due to the increasing electrical costs the Village started imposing a time of day restriction on Well #4 to try and decrease the amount of electrical use during peak demand times. This resulted in the Village pumping more water from the other wells including Well #2. Since Well #2 produces less than 100 gpm, the cost to produce water from Well #2 is approximately double the cost to produce water from Well #4 during peak demand times. The combination of not pumping a large volume of water from Well #4 and the minimal amount of water pumped from Well #2 has increased the cost to produce water for the Village. A summary of the electrical and gas costs to operate all of the wells can be found in Appendix D.

Operation and control of the high service booster pumps is controlled by the 2,000 gallon hydro-pneumatic tank on the County Fair Grounds. Additional high service pumps are operated based on water demand and decreasing water pressure in the high service area.

3.4 Hydraulic Analysis

Jackson's entire water supply and distribution system is modeled in detail using a computer model. The results of this model are discussed in more detail in the next section. The first step in the process is to create a computer model of the existing supply and distribution system. The purpose of this model is to find any problems with the existing system and to serve as a foundation for a model of the entire system.

Jackson's system was flow tested in various locations in the spring of 2006. The results of these flow tests are presented in Appendix A. The computer model is then run with the same conditions in an attempt to match the results. After several trials in which model characteristics are adjusted, it is possible to match the computed model results with the field test results. The

test results matched well in all the tests, indicating that the computer model accurately portrays Jackson's system.

3.5 Adequacy of Existing Facilities

The existing water supply and distribution system for the Village of Jackson meets the various current water demands placed on it. Phased improvements in the supply, storage, and distribution facilities have proven to be cost-effective and timely. The existing wells have met current supply needs.

Generally, the existing storage facilities provide satisfactory static and residual pressures to most areas. The existing distribution system consists generally of properly sized mains that are capable of conveying water and fire flows to the needed areas. Figure 3-3 shows the existing available fire flow in the Village. Fire flow analysis was conducted during maximum day demand, with the water level in the towers approximately 3 feet below overflow and no well pumps in operation. Modifications proposed to strengthen and expand the existing system are discussed in the following section. The following items were identified during the analysis as problem areas.

- **High Pressures.** Some areas in the lower pressure district that have high pressures (greater than 90 psi). Again, these are primarily the result of low ground elevations. These areas are shown on the Future System Static Pressure Map. If there are any homes at an elevation lower than 845, the Village should consider installing individual pressure reducing valves at the meter to help reduce the system pressure in the interior plumbing.
- **Dead-ends.** Currently there are three areas of the distribution system that operate as a long dead-end. The Twin Creeks and Sherman Park subdivisions located in the Southeastern area of the Village are not looped. To increase the water quality and reliability of the system the subdivisions should be connected through the proposed Palorama Farms development. Additionally, the existing 12-inch transmission main that is stubbed on the south side of the Sherman Creek should be connected through the proposed Dalman Village phase 2 development to the Twin Creeks subdivision. This will provide two 12-inch transmission mains a looped system to the southwest area of the Village. The high pressure district booster station is currently supplied water from a

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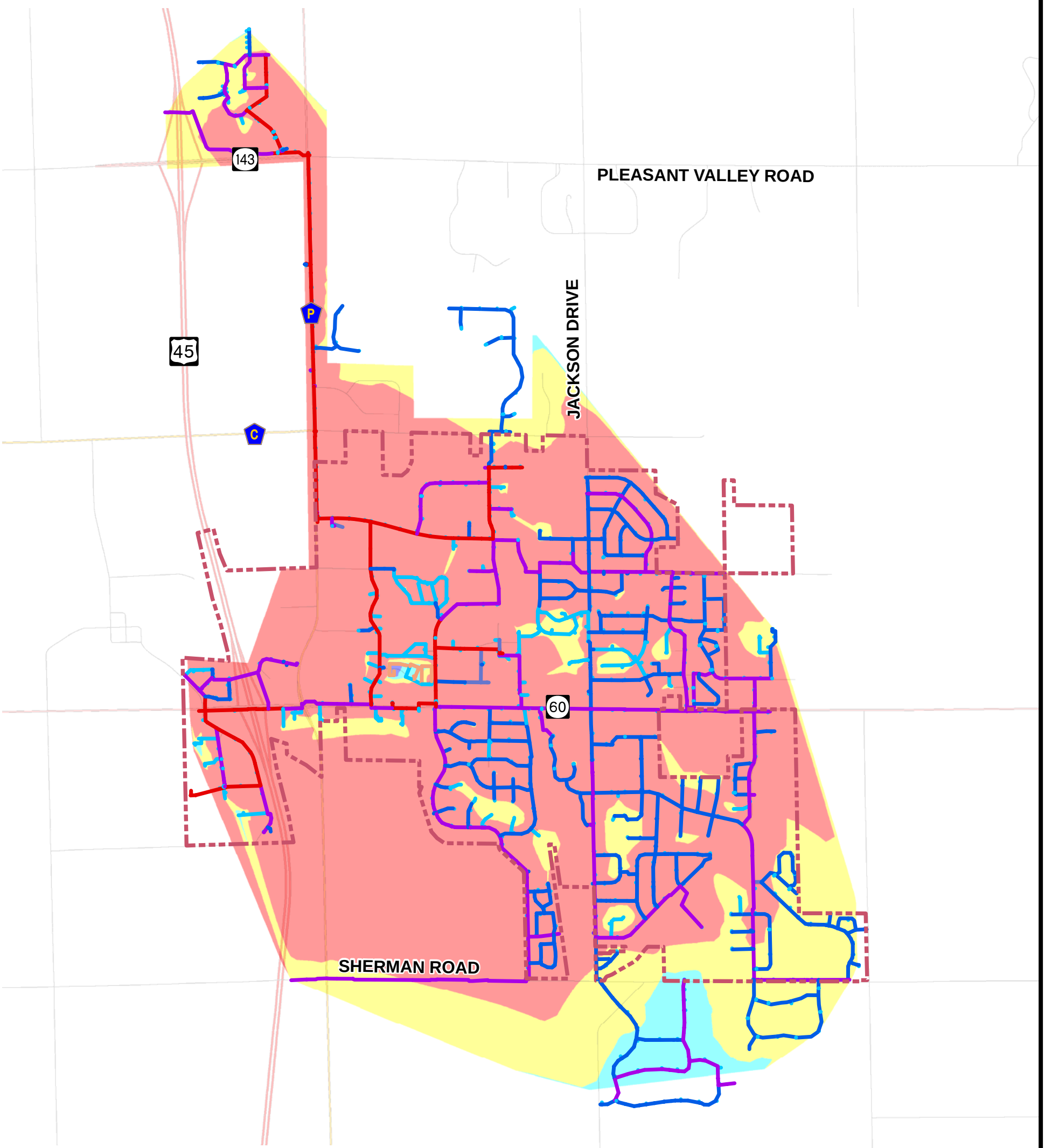
Figure 3-3
Available Fire Flow



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long 16-inch transmission main in CTH P. A second feed to the booster station should be installed to improve the reliability of the booster station to supply water to St. Joseph's Hospital.

The following improvements are recommended based on the results of the hydraulic modeling of the existing system and discussions with Village Staff.

- **Watermain replacement program.** The watermains in the Green Valley mobile home park are old and undersized. We recommend the Village replace the watermains in the park with a new 6-inch diameter main. The Village is also preparing to replace the entire watermain system in the Parkside subdivision in 2006 and 2007. This relay project will help increase the available fire flow in this area of the Village.

- **Railroad crossing.** As part of the Parkside relay project, there is an existing 6-inch railroad crossing connecting Parkview Court with North Cedar Street. This railroad crossing can be eliminated since it will serve a very limited purpose under normal and emergency conditions. Supporting technical memorandum about abandoning this crossing can be found in Appendix A.

- **Well Replacement.** The capacity of well 2 has continued to decrease over the years due to the amount of sand that is pumped when trying to operate at a higher rate. This well will eventually need to be rehabilitated or replaced. The Village should pursue converting the high capacity well in the Cranberry Creek development as a new municipal well.

- **Growth.** As growth occurs in each of the water pressure districts, the water system needs to be expanded to handle that growth. The Future Water System Map at the back of the report shows the water system improvements required to meet the growth of the Village. The Capital Improvement Plan outlined later in this report shows the expected phasing of improvements.

CHAPTER 4 PROPOSED FACILITIES

4.1 Supply-Storage Considerations

Supply capacity, storage volume, and distribution system capacity are interrelated. Tanks act as additional supply sources during peak periods when the primary supply source is incapable of meeting the demand. Thus, the storage tends to stabilize the peaks in water demand and allows the system to produce water at a lower, more uniform rate. The distribution system must be capable of carrying the flows from both the supply sources and the tanks without allowing pressures to drop below approximately 40 psi or rise above 100 psi. Static pressure should be within a range of 50 to 90, if possible. During fires or other emergencies, a residual pressure of 20 psi must be maintained. The system must also be capable of conveying water from the supply source to the tanks for storage without allowing the development of high pumping heads and therefore high pressures in the system during low usage periods.

There are an infinite number of combinations of supply and storage that can be used to meet peak water demands. An economical system can be obtained through an analysis of supply and storage costs.

For the vast majority of communities, the ideal combination of supply and storage is found when the supply equals 100% of the maximum day demand. This is consistent with the recommendations in both the by Great Lakes Upper Mississippi River Board (Ten States Standards), and American Water Works Manual of Practice M32 - Distribution Network Analysis for Water Utilities. The Village of Jackson's system capacity is established at 2.29 MGD which is 100% of the maximum day demand for the projected population of 10,400 persons.

4.2 Hydraulic Analysis

The Jackson water system was analyzed in detail using a hydraulic computer model, Infowater. The model describes the entire system, including wells, pumps, tanks, booster station, and distribution mains. The model was used to analyze the system for several static cases and through a time simulation during the design maximum demand day. The model incorporates the Hazen-Williams energy loss formula and the Hardy Cross procedure. The Hardy Cross procedure balances both flows and energy losses throughout the entire system.

The time simulation analysis examines the system on an hourly basis over the entire maximum demand day, including peak demand periods, tank-filling conditions, and critical pressures. The analysis uses the maximum day demand curve based on the Village's SCADA system output.. A peak hourly demand of two times the maximum day demand was used in the model.

Input for the computer model includes pipe sizes and lengths, point supplies and demands, storage tank characteristics, pump performance curves, and ground elevations all entered in a GIS drawing. The model then computes data for various times of the day based on the demand curve. These data include pipe flows and velocities, energy losses, pressures at each demand point, pumping rates, and storage tank levels.

Analysis of this data facilitates the design of an economical and adequate water system. Results of this analysis and recommendations for improvements are presented later in the report.

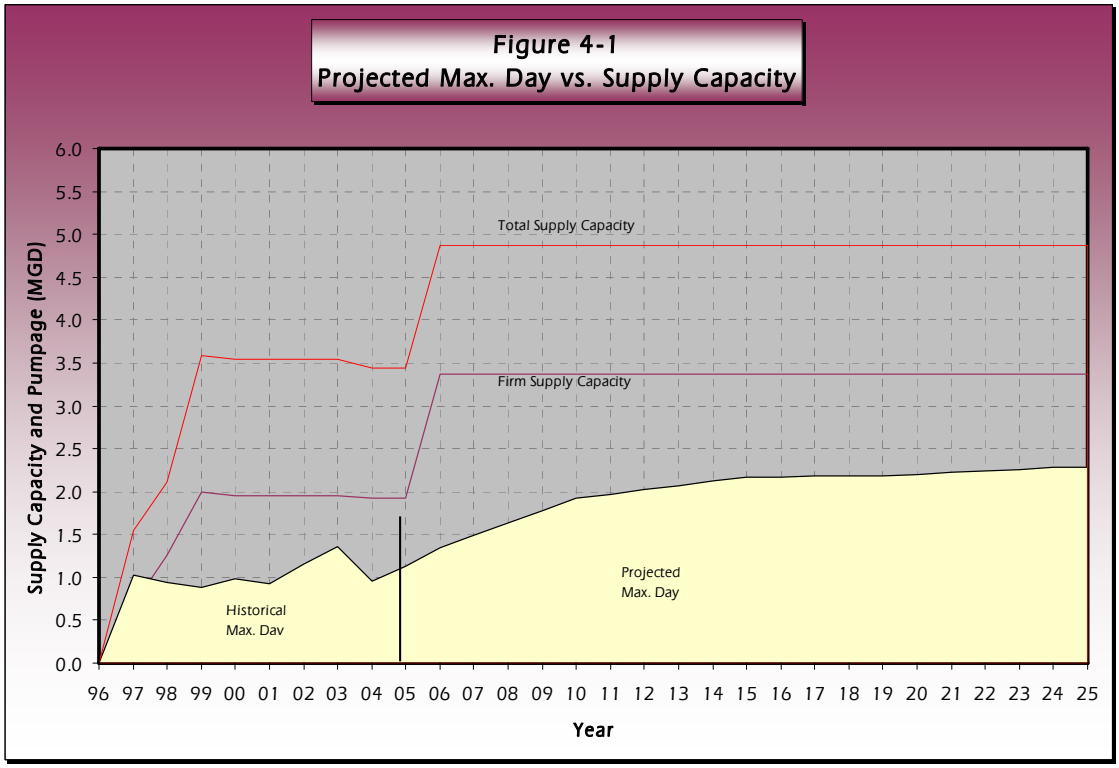
4.3 Water Supply

Wells Required

The amount of reliable or firm water supply required for any municipal water system should be able to meet the maximum day pumpage with the largest well out of service, and there is adequate storage in the distribution system. If both criteria

are met, the water supply will be able to replenish the water in the storage facilities during off-peak hours. While the water used to meet peak hour demand will be supplied by the available storage volume in the storage facilities. Providing a production capacity equal to the maximum day demand will result in improved system reliability by enhancing performance during the tank-filling periods, and particularly in the event of an emergency such as a fire.

The Village's current firm water supply capacity is 1.95 MGD but is anticipated to increase with the addition of Well #5 to 3.39 MGD. A total production capacity of 2.29 MGD (1,590 gpm) is required to meet the demand conditions in the Village for the study limits. This represents 100% of the system's maximum day demand for the study limits. Figure 4-1 compares the historical and projected water supply capacities with the historical and projected maximum day water supply needs. As illustrated in Figure 4-1 he Village will have an adequate supply of water to meet the existing and projected maximum day demand needs.



4.4 Storage

Water storage facilities serve a variety of needs for any distribution system including:

- Establish and maintain water system pressure
- Provide water for fire protection
- Meet the fluctuations water demands in the system
- Provide operational flexibility for water supply facilities
- Improve water supply reliability

Figure 4-2 illustrates the general characterizes for an elevated water storage facility. The operating range is the range that water level will fluctuate between in daily operation to meet system demands. Below the operating range is the volume for fire flow and emergency conditions. The additional storage is to help maintain minimum pressure in the distribution system. Storage facilities should be designed to meet the maximum day demands of the customers while also providing an adequate amount of water for fire protection.

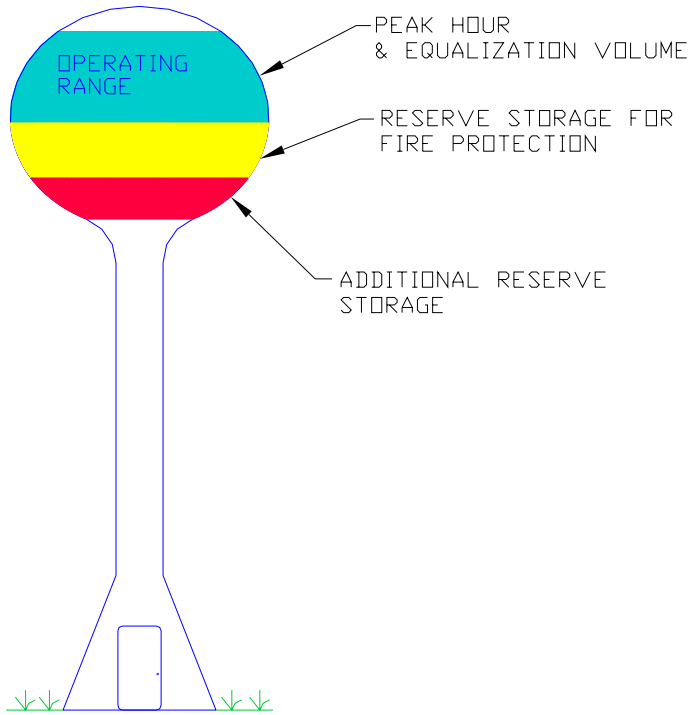


Figure 4-2 - Tank Storage Volumes

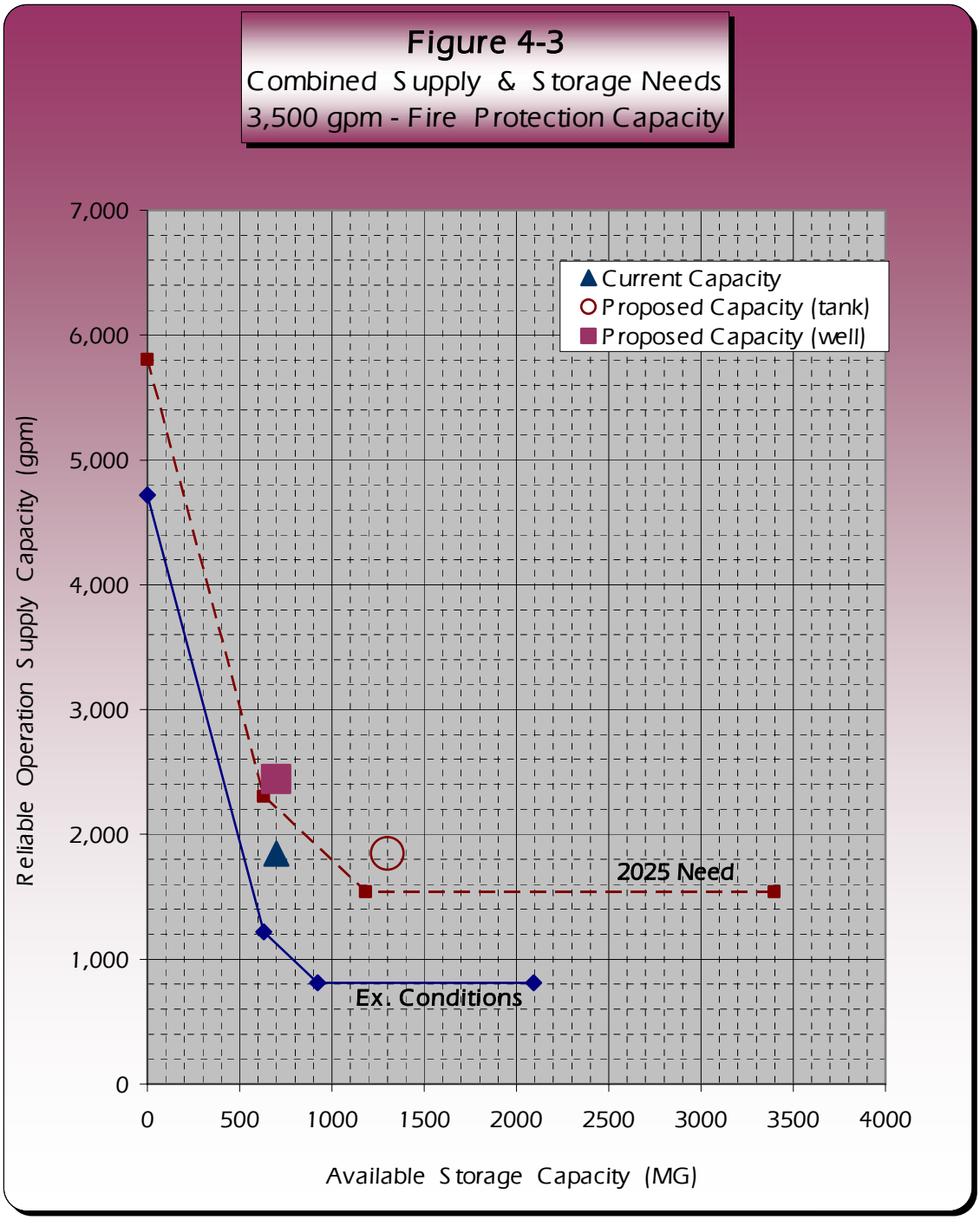
The following criteria were used to develop a relationship between supply capacity and the optimum amount of storage volumes for the Village of Jackson.

- Firm supply capacity should be able to meet projected maximum day demands

- Total available storage should be able to meet fire flow needs with a firm supply capacity that meets maximum day demands. The base fire flow need is 3,500gpm for a duration of 3 hours

The amount of storage required for Jackson's water system is related to the available supply capacity. As the supply capacity is increased, the amount of storage required in the distribution system is decreased. The relationship between the firm supply capacity and usable storage can be seen in Figure 4-3.The optimum amount of water storage required was determined based on the firm water supply capacity of 1,844 gpm and a required fire flow of 3,500 gpm for 3 hours.

A point of the graph is plotted that represents the existing supply (1,844 gpm) and storage (0.7MG) capacities. This point should fall on or above the supply-storage curves for the existing and future systems. The graph shows the Village will be operating above the existing supply-storage curve once Well 5 is in operation. However, the existing supply-storage capacities will need to be increased to meet the future supply-storage curve. Since the firm capacity of the water supply is greater than the future maximum day demand, increasing the capacity of the Village's water storage facilities would be required.



Increasing the storage capacity by approximately 600,000 gallons will help meet the future requirements of the Village. Another option would be to increase the reliable water supply in the Village. Converting the old Cranberry Creek well to replace the existing well 2 will increase the reliable pumping capacity approximately 700 gpm, and allow the Village to meet the future water needs.

The existing and proposed storage sites for the Jackson water distribution system are shown on Figure 4-4. A total of 1.3 million gallons (MG) of storage at 4 sites is planned. The future storage capacity is higher than the typical design of about 30 percent of the future maximum day demand for the following reasons.

- To maintain pressures – the variation in ground elevation limits the effective storage in each tank.
- Redundancy – high pressure district does not have a back-up source of water.
- Operational Control – The high pressure district currently has virtually no storage capacity only enough to maintain system pressure. As the high pressure district grows the need for an additional storage facility will increase in order to properly operate the booster pumps.

The proposed elevated water storage tanks have been located to take advantage of high ground, thus minimizing construction costs. They are also located at points within the distribution system which complement the primary supply points and thereby maintain more constant water pressure during peak demand periods.

Table 4-1 shows the proposed storage facilities. The following paragraphs discuss some of these facilities in greater detail.

Table 4-1 Proposed Storage Facilities

Storage Location	Type of Storage Facility	HWL	Total Storage (MG)	Service District
Business Park (tank 2)	Elevated	1,065	0.5	Low
Low District (tank 1)	Elevated	1,065	0.2	Low
Sherman Road	**Elevated**	**1,065**	**0.3**	**Low**
Pleasant Valley Rd.	**Elevated**	**1,140**	**0.3**	**High**
Total			**1.3**	

4.5 Distribution System

General

The proposed distribution system for the Village of Jackson is presented on Figure 4-4. There are five water supply sites in the proposed system and four elevated water storage facilities. A strong network of transmission water mains extend in every direction from these sites. Major

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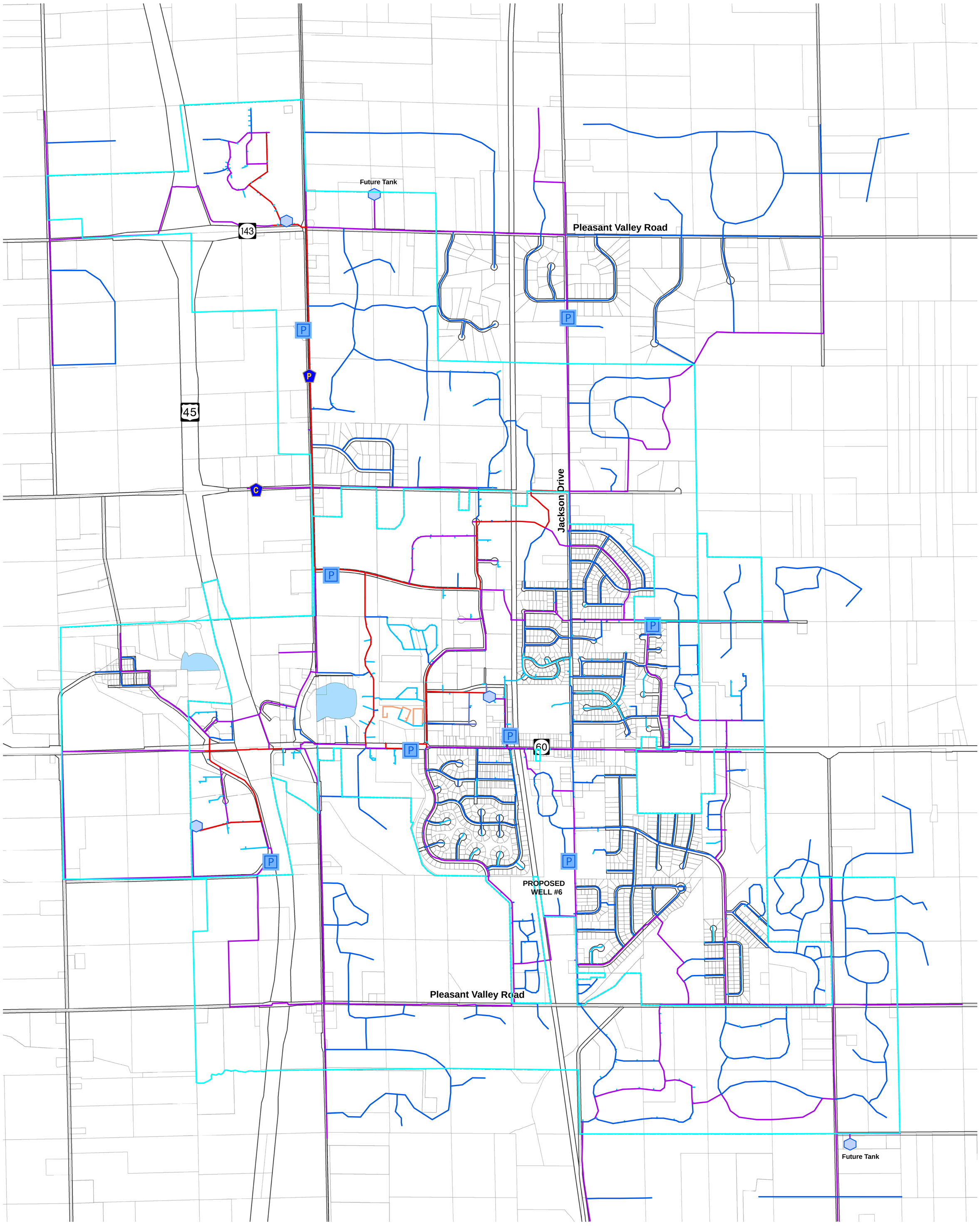
Figure 4-4
Proposed Distribution System



Legend

- Pumps
- Village Limits
- Study Limits
- Tanks

Pipes

- 4" Diameter Pipe
- 6" Diameter Pipe
- 6" Diameter Pipe
- 8" Diameter Pipe
- 10" Diameter Pipe
- 12" Diameter Pipe
- 16" Diameter Pipe

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0 500 1,000 2,000 3,000 Feet

N

water mains connect the storage tanks and the supply sources and are looped throughout the system in order to provide reliable service.

The Village's topography ranges from elevation 830 to elevation 1040. The distribution system has been divided into two pressure districts, to provide a static pressure range of 35 psi to over 95 psi (pounds per square inch). Static pressure is defined as the pressure available at the street when all the tanks are full and no one is using water. The proposed high pressure district boundary can be seen in Figure 4-4. The boundary line was determined based on a 125 foot service range for both zones and an overlapping static pressure range of approximately 20 psi. The low pressure district will serve an elevation range between 830 and 955 and the high pressure district will serve an elevation range between 915 and 1040. Figure 4-5 illustrates the static pressures for the future distribution system.

Static pressures within the system, as measured at street level, are satisfactory if they are maintained between 40 psi and 90 psi. Under peak demand conditions, it is desirable to maintain residual pressures above 30 psi. Under emergency conditions, pressures must be maintained above 20 psi. In some instances, static and residual pressures may exceed 90 psi where an area is at low ground elevations. All homes with a static pressure of greater than 80 psi may want to have individual pressure reducing valves installed in the homes. Homes with static pressures below 40 psi should have in-home pressure booster stations.

Hydraulic Analysis

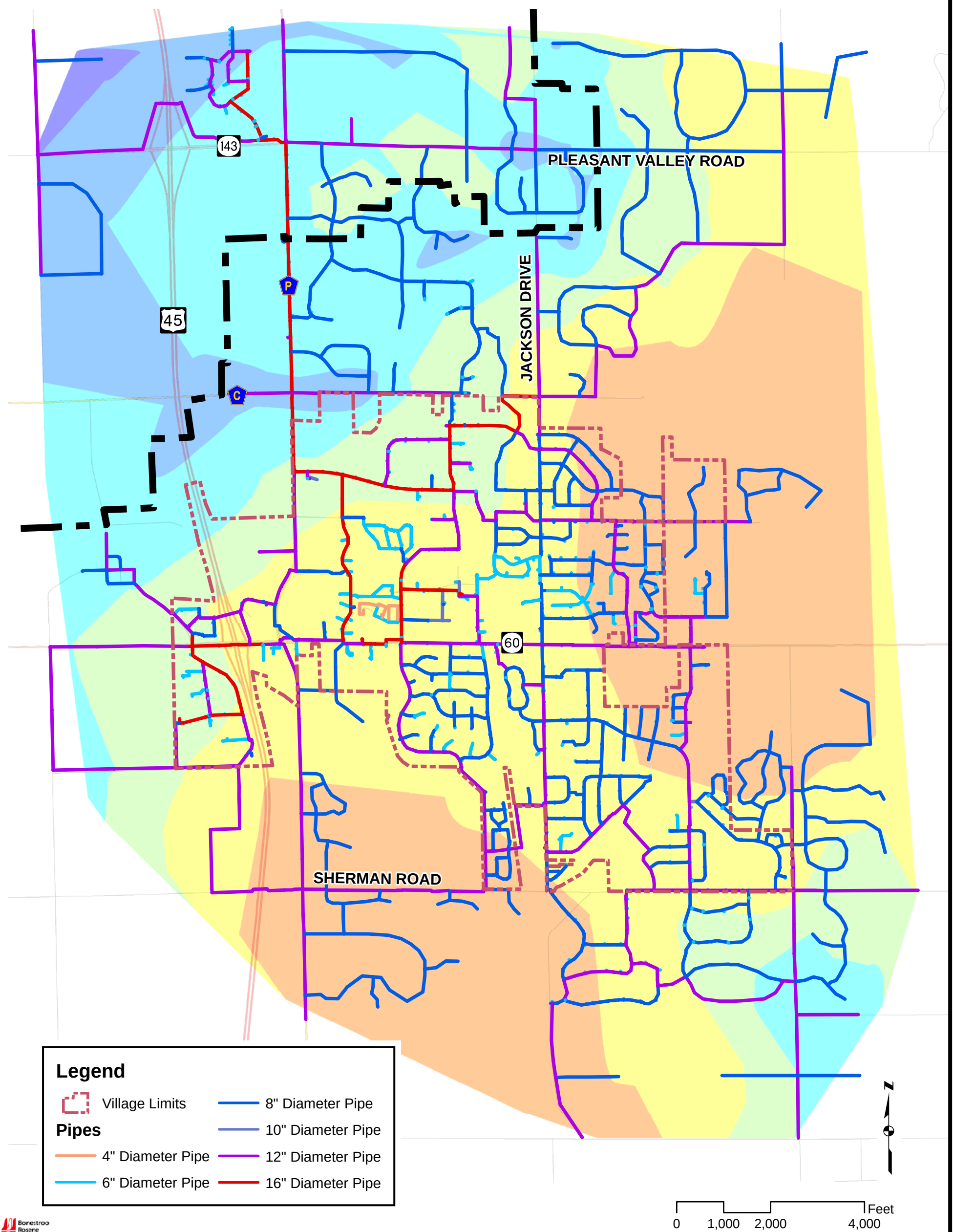
The computer analysis described previously was used to design and analyze the ultimate water system during the maximum day. The future system shown on Figure 4-4 was evaluated on the following parameters.

- **Tank Operation:** The water level in a tank should 'bounce' during the day to maintain a fresh source of water in the tank, but the tank should not empty during the maximum day to provide a safety factor in an emergency. The analysis verifies minimum level, ending level, and total operation time for each tank.

- **Pump Operation:** The water supply well pumps should operate as close to optimum as possible through the maximum day.

Map Document: (N:\841\84105119\Cad\GIS\mxd_projects\Static Pressure 11 x 17.mxd)
4/26/2006 -- eoj

Figure 4-5
Future Static Pressure



- **High Pressure Areas:** Areas at low ground elevations are susceptible to high pressure problems. As the Static Water Pressure Map at the back of the report shows, there are several areas with high static pressures. In-home pressure reducing valves are desirable anytime the static pressure is above 80 psi. High pressures can also occur during low demand periods due to excessive headloss in pipes used to fill tanks. None of Jackson's high pressures are due to tank filling conditions.

- **Fire Flows:** The Insurance Services Office (ISO) recommended fire flows are shown in Table 5. All areas outside the urban service area are designed for 3,500 gpm (gallons per minute) since it is not possible to determine the exact location of single family residential at this time. Figure 4-6 shows the fire flow for the future service area. All areas will meet or exceed the recommended fire flows while maintaining 20 psi residual pressure.

- **Railroad Crossings:** The existing 6-inch railroad crossing into the Parkside subdivision was abandoned as part of the future service area hydraulic analysis. The existing 16-inch crossing into the planned Laurel Springs subdivision should be extended to Jackson Drive to serve as transmission main to any new development in the Northeastern zone of the service area. The existing 12-inch crossing south of Highway 60 should also be extended to the 12-inch main in Jackson Drive.

4.6 Water System Phasing

The projected served population of Jackson in the year 2025 is approximately 10,400. Based on the projected population growth, additions to the supply, and storage facilities were estimated until the year 2025 and are presented in Table 4-2. These additions will keep pace with the increasing needs of the community and at the same time maintain a desirable balance between storage and supply for economy and reliability. If growth rates deviate from the Village's forecasts, if a major water consumer is added to the system, or conservation measures produce a result different than anticipated, the phasing schedule of Table 4-2 should be revised in accordance with the latest available data. The data presented in Table 4-2 is based on the assumption the new well#6 will provide an 800 gpm supply and the required storage is will provide enough emergency water storage for a 3 hour fire duration at 3,500 gpm.

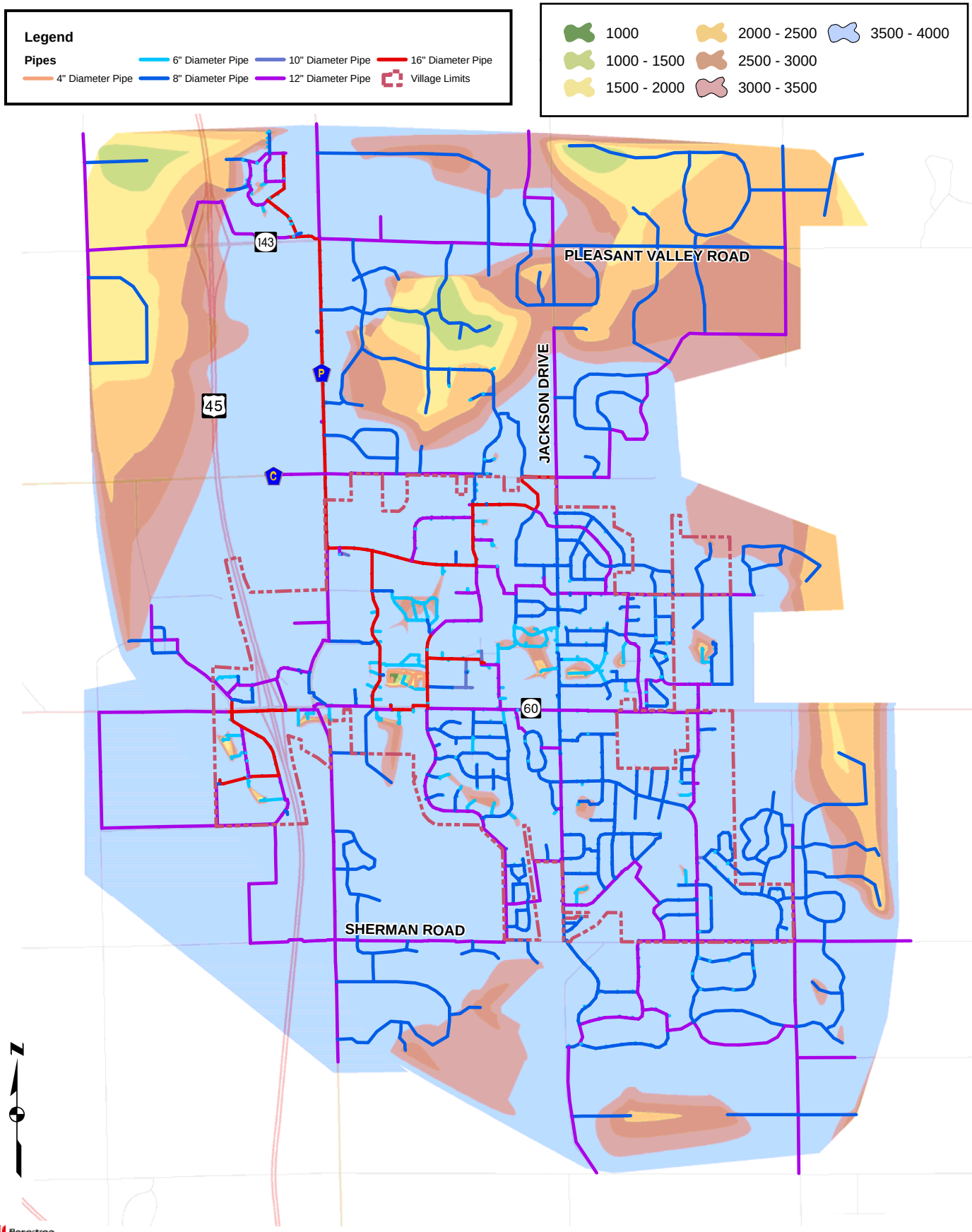
Table 4-2 Water Supply / Storage Phasing

Year	Served Population	Max. Day Demand		Supply		Storage		Comments
		(gpm)	(MGD)	Required (gpm)	Available (1) (gpm)	Required (MG)	Available (MG)	
2005	5,884	838	1.21	838	844	0.5	0.7	
2006	6,491	933	1.34	933	1844	0.55	0.7	
2007	7,098	1,030	1.48	1,030	1844	0.6	0.7	
2008	7,706	1,129	1.63	1,129	2544	0.65	0.7	cranberry well conversion
2009	8,313	1,230	1.77	1,230	2544	0.7	1	add 3rd tower to low zone
2010	8,920	1,332	1.92	1,332	2544	0.8	1.3	add tower to north zone
2015	9,872	1,508	2.17	1,508	2544	0.95	1.3	
2020	10,000	1,528	2.20	1,528	2544	1	1.3	
2025	10,400	1,589	2.29	1,589	2544	1.1	1.3	

(1) well pump capacities have a duty rating of 80%

Map Document: (N:\841\84105119\Cad\GIS\mxd_projects\Static Pressure 8-5 x 11.mxd)
4/24/2006 -- EOJ

Figure 4-6
Future Available Fire Flow



Bonestroo Rosene Anderlik & Associates
Engineers & Architects

CHAPTER 5- CAPITAL IMPROVEMENT PLANNING

Based on the planned developments within the Village limits and the projected growth of the service area, the water system will require improvements to accommodate the future water needs. The recommended improvements are presented in this chapter in a Capital Improvement Plan (CIP) for the Village. The CIP prioritizes system improvements and provides a schedule for the timing of project construction. Each proposed improvement also contains a budget cost estimate for the improvement.

5.1 Supply Improvements

The current reliable pumping capacity of the Village's supply system in 1844gpm, well above the system's current maximum day demand need of 840 gpm. However Well #2 in the Village only produces 70 gpm of water and has an average operating cost of approximately double that of the other Village wells. We recommend abandoning Well #2 and converting the old Cranberry Creek well to a municipal well capable of producing 700 gpm of water. The converted well will provide the Village with an increased supply of water capable of meeting the long term needs of the Village.

5.2 Storage Improvements

Recommended storage volumes in the system over the planning period are dependent of the future status of the high pressure zone, conversion of the Cranberry Creek well, and the peak hour demand in the distribution system. Currently there is no water storage in the high pressure zone for the Hospital and the County Fair grounds. As the distribution system expands in the high pressure zone, and the water demand increase to over 200 gpm, a water storage facility will be required. The 200 gpm threshold was set in the conditional approval letter from the DNR in 2000, when the high pressure booster station was constructed. A copy of the approval letter is in Appendix A. The Village has identified an area just north of Pleasant Valley Road as the site of the new storage facility. The timing of the new storage facility will greatly depend on the development along HWY 45, however, we recommend the Village secure the land for a new facility in 2007 in anticipation of constructing a new facility in 2010.

5.3 Distribution Improvements

Figure 5-1 is the proposed Village of Jackson Water Utility master plan for the Year 2025. The figure illustrates the recommend improvements to the existing distribution system, and the transmission main improvements to serve the planned developments within the service area. The improvements have been recommended to strengthen the transmission main system, develop a second feed to the high pressure zone, and to allow expansion of the distribution system into future service areas.

5.4 Capital Improvement Plan

The proposed CIP is presented in Table 5-1. The plan presents budget costs estimates and a proposed timeframe of the recommended improvements over the planning period.

TABLE - 5-1

RECOMMENDED CAPITAL IMPROVEMENTS PLAN

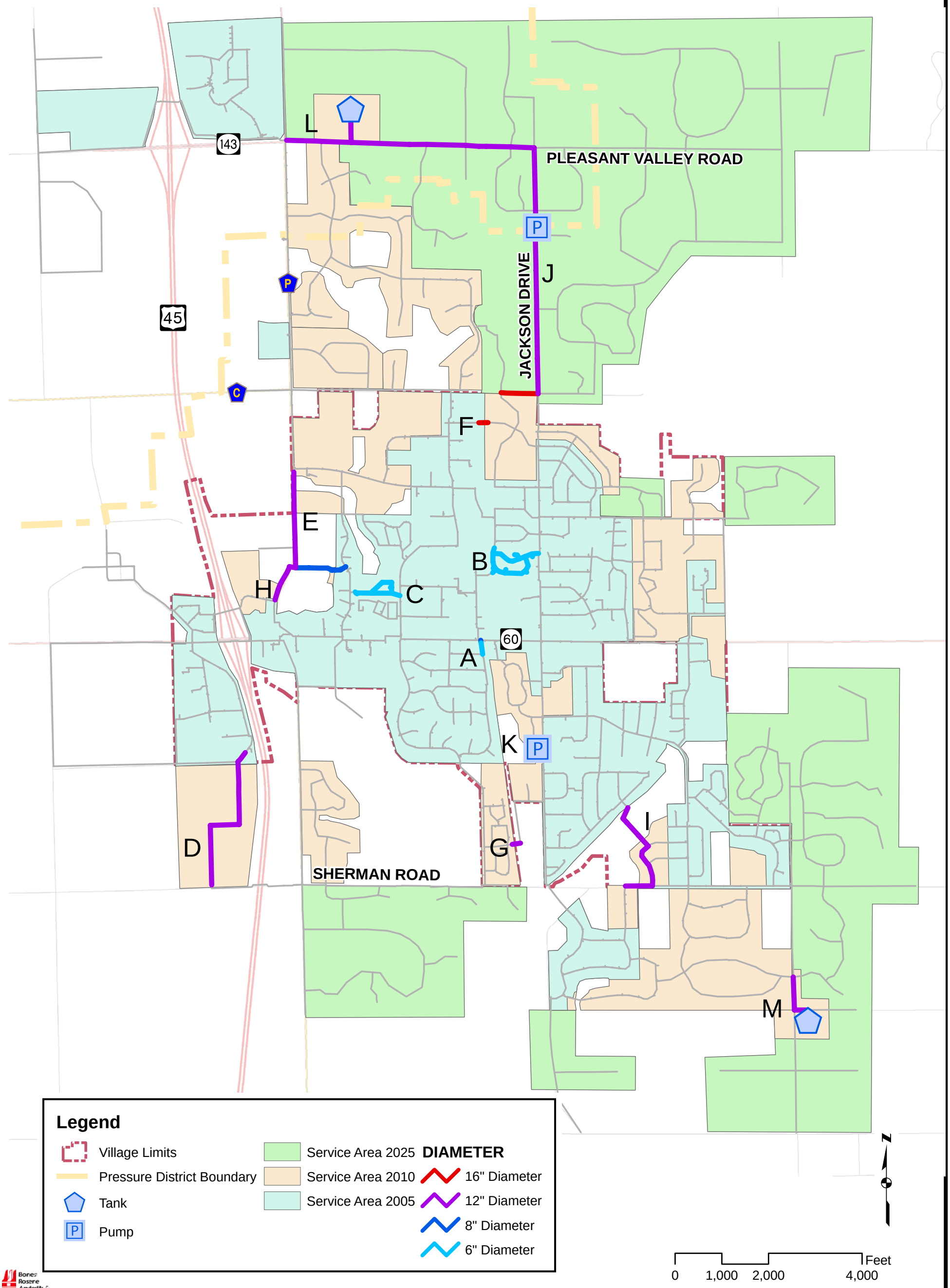
Village of Jackson

Project	Cost Estimate
Existing Distribution System - relay projects	
S. Center Street (Main St to Reynolds)	$480,000
Parkside Subdivision/ Jackson Drive	$1,900,000
Green Valley I (last phase)	$520,000
Proposed Development Projects - system expansion	
Water/Sewer Main - Sherman Rd (Glen Brooke Dr to Well 4)	$500,000
TIF Projects	$1,600,000
Water main under tracks Cedar Creek Road (Laurel Springs)	$200,000
Water main under tracks at Prange's Property	$130,000
Aurora Water Main Loop across CTH "P"	$450,000
Water main on Sherman (Dallmann Village Phase 2)	Developer's expense

Project	Cost Estimate
Supply Improvements	
Well #6	$450,000
Storage Improvements	
High Pressure Storage Tower	$400,000
Low Pressure Storage Tower	$400,000

Map Document: (N:\841\84105119\Cad\GIS\mxd_projects\Future Fire Flow 11 x 17.mxd)
4/26/2006 -- EOJ

Figure 5-1
Proposed Improvement Projects



Bonestroo Rosene Anderlik & Associates
Engineers & Architects

APPENDIX A

Bonestroo Rosene Anderlik & Associates
Engineers & Architects

Mequon Office
12075 N. Corporate Parkway
Suite 200
Mequon, Wisconsin 53092
Phone: (262) 241-4466
FAX: (262) 241-4901

MEMO

TO: TSN

DATE: March 15, 2006

FROM: MWP

RE: RR crossings

Summary and Conclusion:
The 6" water main connecting Parkview Court and North Center Street adds little value to the water system under either normal or emergency conditions. Investment in a replacement is not advisable. This main can be abandoned in the future without significant negative effects. The pipes loss only appeared significant when combined with the additional loss of the railroad crossings located to its north and south. This combined loss would produce significant effects, but the resulting conditions would remain far in excess of the critical needs.

Background:
The existing water main in the subdivision containing Parkview Court is all 6" iron main. Near-term plans call for the replacement of the main in this subdivision. The existing water main linking Parkview Court with North Center Street is also 6" diameter iron pipe and crosses a railroad right-of-way that runs north-south. The value of this pipe link to North Center Street was studied to determine the value and importance of including it as part of the area main replacement plan. Water main connections across the railroad right-of-way are sparse, making each crossing more critical than a similar pipe would be otherwise. For this reason, the simultaneous loss of the water main crossing to the north and south of this location was also considered.

Analysis:
The Village of Jackson computer model was configured to simulate performance of the water system under different scenarios in order to determine value of the pipe link with North Center Street. All simulations assumed the other main in the subdivision in question had been replaced with new 8" PVC pipe. Operation under non-emergency demands produced no noticeable effects and therefore only the effects on emergency fire flow capacity is reported.

All hydrants in the subdivision were examined to determine how high a flow rate would be available under demanding water use conditions. The hydrants on adjacent portions of Jackson Drive were also evaluated, but were dropped from the reported results, as these results were substantially less significant.

Results:
Demand Conditions: Maximum Annual Day demand – Maximum Demand Hour Average

SIMULATION CONDITIONS	**Range of Critical Fire Flows within subdivision**
Existing 6" main in service	2400-3900 gpm
Existing 6" main out of service	2300-3400 gpm
Combination- 6" main & RR crossing South out of service	1800-2400 gpm
Combination- 6" main & RR crossing North out of service	1800-2400 gpm

FIRE FLOW TEST

Test Date: 5-2-06 2:15pm Test I.D. #: 1 Project # 841-05119

Municipality: Village of Jackson

Pressure District:

LOCATION

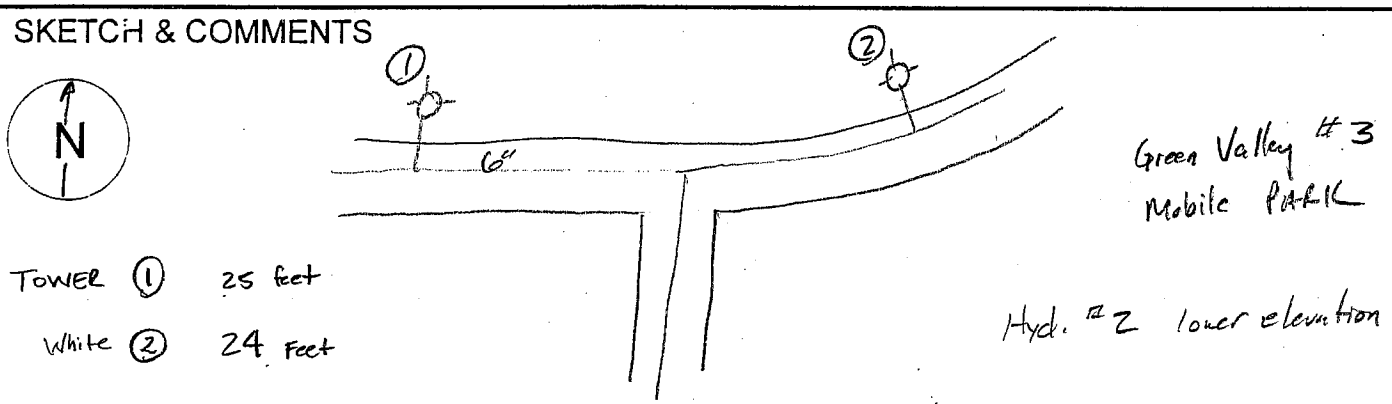
Flowing Hydrant(s): Elevation: 885.94

(2) J-788 Elevation:

Pressure Hydrant(s): Elevation: 895.15

(1) J-790 Elevation: 71.85

SKETCH & COMMENTS



Tower (1) 25 feet

White (2) 24 feet

FLOW HYDRANT (separate or change in flow)

Hyd #	Time	Static	Outlet	Dia.	Coeff.	Pitot Pressure (psi)	Flow (gpm)
(2)	2:15 - 2:19		1	2½"	0.90	50	1234
	: - :						
	: - :						
	: - :						

RESIDUAL HYDRANT (separate or change in pressure)

		Pressure (MAX-AVG-MIN)				Pressure Drop		Test Flow	Flow @ 20psi
Hyd #	Time	Before	Residual	After	El. Corr.	Test	@ 20psi		
1	2:15 - 2:19	73	68-67	73-74		5	48	1234	4185
	: - :								
	: - :								
	: - :	72	68.3			3.5			
	: - :								
	: - :								

Pump Activity Triggered Y N

Damage Y N

By:

Assisted:

$$Q_{20} = Q_T \left(\frac{\Delta P_{20}}{\Delta P_T}\right)^{0.54} \qquad Q = 29.83cd^2\sqrt{P}$$

Nozzle Coefficients

well rounded, smooth - 0.90

squared off at barrel, sharp edged - 0.80

projects into barrel, sharp edged - 0.70

Bonestroo Rosene Anderlik & Associates

Engineers & Architects

FIRE FLOW TEST

Test Date: 5-2-06 Test I.D. #: 2 Project # 841-05119

Municipality: Village of Jackson

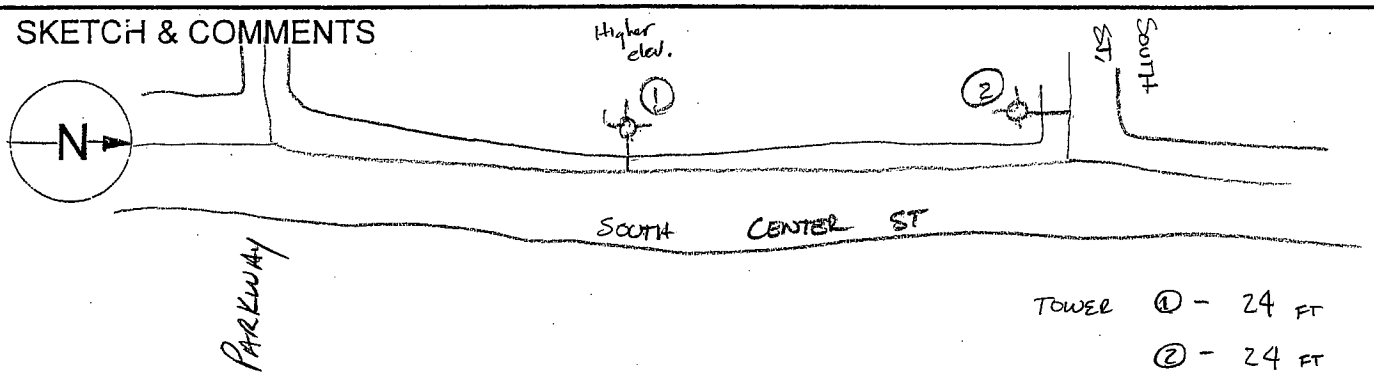
Pressure District:

LOCATION

Flowing Hydrant(s): ON SOUTH CENTER BETWEEN SOUTH ST. & PARKWAY J-318 Elevation: Elevation: 899.74

Pressure Hydrant(s): SW CORNER OF SOUTH ST. & SOUTH CENTER ST. J-404 Elevation: Elevation: 897.25

SKETCH & COMMENTS



TOWER ① - 24 FT
② - 24 FT

FLOW HYDRANT (separate or change in flow)

Hyd #	Time	Static	Outlet	Dia.	Coeff.	Pitot Pressure (psi)	Flow (gpm)
1	2:35 - 2:37		1	2½	0.9	48	1220
	: - :						
	: - :						
	: - :						

RESIDUAL HYDRANT (separate or change in pressure)

		Pressure (MAX-AVG-MIN)				Pressure Drop		Test Flow	Flow @ 20psi
Hyd #	Time	Before	Residual	After	El. Corr.	Test	@ 20psi		
2	2:35 - 2:37	69	62-65	68		7	42	1220	3,210
	: - :								
	: - :								
	: - :	70.5	69.1						
	: - :								
	: - :								

Pump Activity Triggered Y N

Damage Y N

By: TSN

Assisted: DAN RADKE

$$Q_{20} = Q_T \left(\frac{\Delta P_{20}}{\Delta P_T}\right)^{0.54} \qquad Q = 29.83cd^2\sqrt{P}$$

Nozzle Coefficients

well rounded, smooth - 0.90
squared off at barrel, sharp edged - 0.80
projects into barrel, sharp edged - 0.70

Bonestroo Rosene Anderlik & Associates
Engineers & Architects

FIRE FLOW TEST

Test Date: 5-2-06 Test I.D. #: 3 Project # 841-05119

Municipality: Village of Jackson

Pressure District: Low

LOCATION

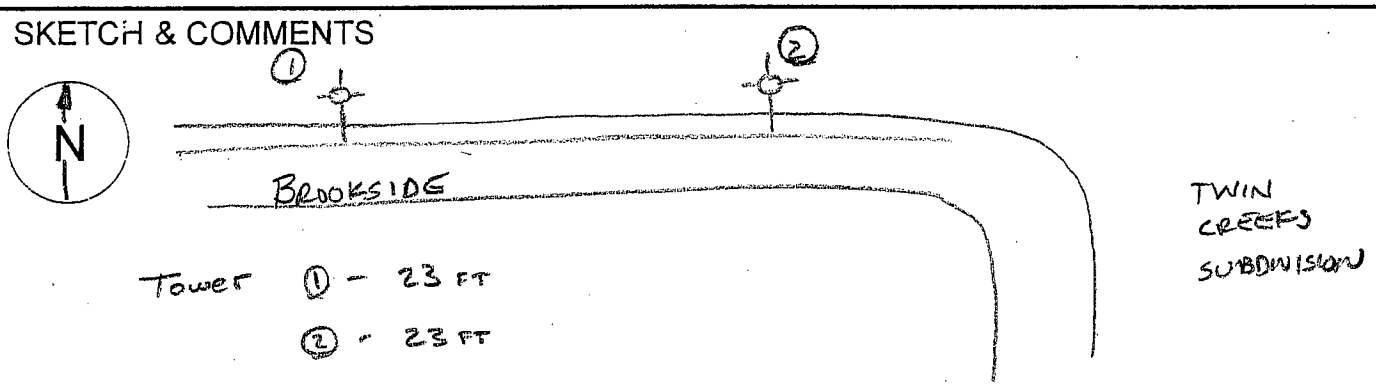
Flowing Hydrant(s): FIRST HYD. EAST OF PRESSURE HYD. Elevation: 869.57

J-136 Elevation:

Pressure Hydrant(s): 2400 BROOKSIDE Elevation: 861.95

J-134 TWIN CREEKS SUBDIVISION Elevation:

SKETCH & COMMENTS



Tower 1 - 23 FT

2 - 23 FT

FLOW HYDRANT (separate or change in flow)

Hyd #	Time	Static	Outlet	Dia.	Coeff.	Pitot Pressure (psi)	Flow (gpm)
2	2:53 - 2:55		1	2 1/2"	0.9	20 - 34	835 - 1062
	: - :						
	: - :						
	: - :						

RESIDUAL HYDRANT (separate or change in pressure)

		Pressure (MAX-AVG-MIN)				Pressure Drop		Test Flow	Flow @ 20psi
Hyd #	Time	Before	Residual	After	El. Corr.	Test	@ 20psi		
1	2:53 - 2:55	79	38-52-58-65	79		24			
	: - :	85.3							
	: - :		70.9	63					
	: - :								
	: - :								
	: - :								

Pump Activity Triggered Y N

Damage Y N

By: TSN

Assisted: DAN Radtke

$Q_{20} = Q_T \left(\frac{\Delta P_{20}}{\Delta P_T}\right)^{0.54}$ $Q = 29.83cd^2\sqrt{P}$

Nozzle Coefficients

well-rounded, smooth - 0.90

squared off at barrel, sharp edged - 0.80

projects into barrel, sharp edged - 0.70

Bonestroo Rosene Anderlik & Associates

Engineers & Architects

FIRE FLOW TEST

Test Date: 5-2-06 Test I.D. #: 4 Project # 841-05119

Municipality: Village of Jackson

Pressure District: Low

LOCATION

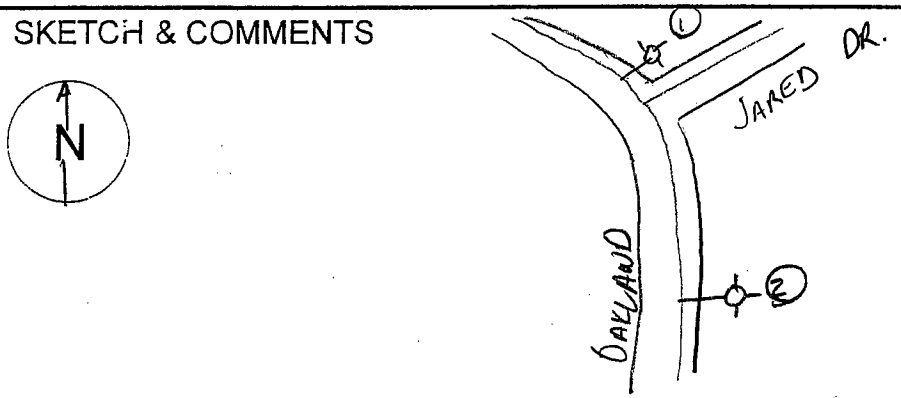
Flowing Hydrant(s): Jared Dr. Elevation: 882.73

J-90 Elevation:

Pressure Hydrant(s): Oakland Ave Elevation: 882.17

J-88 Elevation:

SKETCH & COMMENTS



Tower

1 - 23

2 - 23

FLOW HYDRANT (separate or change in flow)

Hyd #	Time	Static	Outlet	Dia.	Coeff.	Pitot Pressure (psi)	Flow (gpm)
1	3:05 - 3:07		1	2½	0.9	40	1152
	: - :						
	: - :						
	: - :						

RESIDUAL HYDRANT (separate or change in pressure)

		Pressure (MAX-AVG-MIN)				Pressure Drop		Test Flow	Flow @ 20psi
Hyd #	Time	Before	Residual	After	El. Corr.	Test	@ 20psi		
2	3:05 - 3:07	72-76	42-60-62	64 70-72		10	42	1152	2,500
	: - :								
	: - :	76.2		68.3					
	: - :								
	: - :								
	: - :								

Pump Activity Triggered Y N

Damage Y N

By: TSN

Assisted: DAN RADTKE

$$Q_{20} = Q_T \left(\frac{\Delta P_{20}}{\Delta P_T}\right)^{0.54} \qquad Q = 29.83cd^2\sqrt{P}$$

Nozzle Coefficients

well rounded, smooth - 0.90

squared off at barrel, sharp edged - 0.80

projects into barrel, sharp edged - 0.70

Bonestroo Rosene Anderlik & Associates

Engineers & Architects

FIRE FLOW TEST

Test Date: 5-2-06 Test I.D. #: 5 Project # 841-05119

Municipality: Village of Jackson

Pressure District:

LOCATION

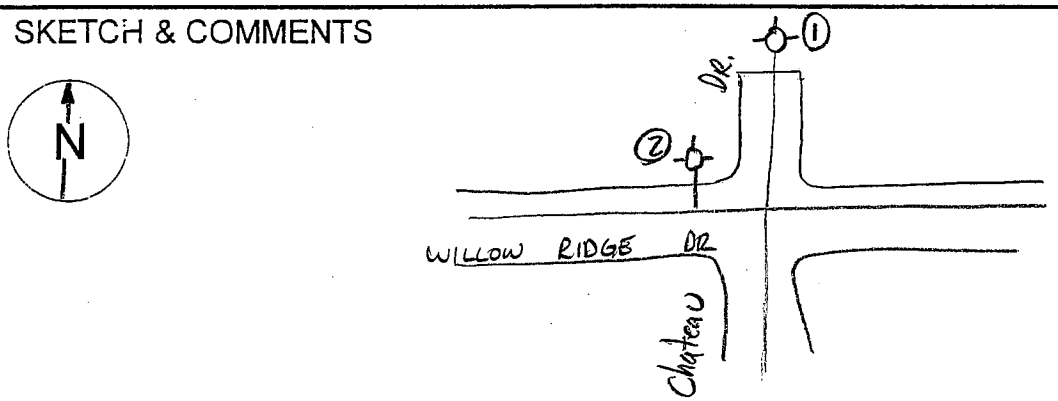
Flowing Hydrant(s): CHATEAU DR. DEAD-END Elevation: 877.57

J-590 Elevation:

Pressure Hydrant(s): NW CORNER OF CHATEAU & Elevation: 879.42

WILLOW RIDGE DRIVE J-592 Elevation:

SKETCH & COMMENTS



TOWER
1 23
2 22

FLOW HYDRANT (separate or change in flow)

Hyd #	Time	Static	Outlet	Dia.	Coeff.	Pitot Pressure (psi)	Flow (gpm)
1	3:19 - 3:21		1	2 1/2	0.9	50	1234
	: - :						
	: - :						
	: - :						

RESIDUAL HYDRANT (separate or change in pressure)

		Pressure (MAX-AVG-MIN)				Pressure Drop		Test Flow	Flow @ 20psi
Hyd #	Time	Before	Residual	After	El. Corr.	Test	@ 20psi		
2	3:19 - 3:21	77	64-10 72	79		7	50	1234	
	: - :								
	: - :	77.76	75.7						
	: - :								
	: - :								
	: - :								

Pump Activity Triggered Y N

Damage Y N

By: TSN

Assisted: DAN ROOKE

$$Q_{20} = Q_T \left(\frac{\Delta P_{20}}{\Delta P_T}\right)^{0.54} \qquad Q = 29.83cd^2\sqrt{P}$$

Nozzle Coefficients

well rounded, smooth - 0.90
squared off at barrel, sharp edged - 0.80
projects into barrel, sharp edged - 0.70

Bonestroo Rosene Anderlik & Associates
Engineers & Architects

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

WISCONSIN
DEPT. OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary

101 S. Webster St.
Box 7921
Madison, Wisconsin 53707-7921
Telephone 608-266-2621
FAX 608-267-3579
TDD 608-267-6897

May 24, 1999

P&S No. 98-1980

MR DELMORE BEAVER CLERK
VILLAGE OF JACKSON
N168 W20733 MAIN ST
PO BOX 147
JACKSON, WI 53089

Dear Mr. Beaver:

The Division of Water is conditionally approving an underground booster station as submitted by Paul Eiring, professional engineer, Graef, Anhalt & Schloemer and Associates, Inc. The request for approval was received on December 30, 1998. Two thirty day time extensions were granted for review of the project. Revised plan sheets were received on April 9, 1999. Additional information about the project was submitted on April 28, 1999 and on May 11, 1999.

The underground booster station will be located approximately 5000 feet north of the Village of Jackson, on the west side of County Trunk Highway 'P'. The proposed construction will include an above-grade surge tank building and an emergency generator installed on a reinforced concrete foundation and slab. Initially, the booster station will provide water to the county fair grounds. Ultimately, the booster station will provide water to a service area shown in Appendix C in the engineering report, WATER BOOSTER STATION FOR WASHINGTON COUNTY FAIR PARK (dated December 1998).

The maximum elevation of the proposed (boosted) service area is 1002 feet. The pump-on elevation for the 500,000 gallon Village of Jackson elevated tank was reported to be 1058 feet. Thus, the minimum static pressure zone in the service area (without the booster station) would be 24 psi. The design (maximum) flow rate during the operation of the county fair park is 400 gpm. The average flow rate for the developed service area with the fair in operation is 700 gpm. The service area will eventually provide water service to 200 acres of commercial development and 300 acres of residential development. The design residential population is estimated to be 800. With this development, the Village of Jackson would need additional source capacity to meet the increase in demand (letter from Paul Eiring, Graef, Anhalt & Schloemer and Associates, Inc., dated April 26, 1999).

Four variable speed booster pumps will be installed in a below-grade, elliptical-shaped chamber. The elevation of the finished grade above the booster station will be 934.23 feet. Access to the chamber for personnel will be through a 30 inch by 96 inch (locking) hatch and a metal stairway. A 48 inch diameter equipment access tube will allow for the removal of the pumps and motors. The manway hatch and the equipment access cover will be 24 inches above finished grade. A ceiling-mounted monorail and hoist system will be provided for interior handling of heavy equipment. The chamber will be provided with heating, lighting, mechanical ventilation, and dehumidification equipment. A tap for emergency chlorination will be installed in the discharge piping within the booster station.

The four variable speed pumps will have the following design and operation parameters:

Pump No.	Flow Rate (gpm)	TDH (feet)	HP	Pump Operation Notes
1	600 max.	100	30	Alternating start-up with Pump No. 2
2	600 max.	100	30	Second pump starts at 35 psi

Pump No.	Flow Rate (gpm)	TDH (feet)	HP	Pump Operation Notes
1 and 2	1000	109	n/a	operating simultaneously
3	2100 average	74	50	alternating start-up with Pump No 4
4	2100 average	74	50	Pump Nos. 3 or 4 starts at 30 psi

A meter pit and a surge tank pit have been constructed at a site located on the County Fair property. The installation of equipment in the meter pit will include a 100 gallon surge tank. The flow meter will send flow rate data to a SCADA system. The installation of equipment in the surge tank pit will include two 500 gallon surge tanks. A pressure sensor will be located in the surge tank vault to provide control of the booster pumps. The engineering report indicated that the two surge tanks should be replaced with an elevated tank when the average (daily) flow rate approaches 200 gpm.

Conditions of Approval

The plans and specifications and other reports on file with the Department were used as the basis for conditional approval. The plans and specifications are hereby approved in accordance with s. 281.41, Statutes as attested by affixing on the plans and specifications, the stamp of approval Number 98-1980, subject to the following conditions:

1. The water supply facilities shall be thoroughly disinfected and not be placed in service until bacteriologically safe samples have been obtained in accordance with s. NR 811.07(3), Wis. Adm. Code.

2. Nuetralization and disposal of any chlorinated water after disinfection of the booster station piping and the associated water mains shall be according to a written plan submitted to and approved by staff from the Department's Southeast Region (Contact Elizabeth Spaeth-Werner at 414-229-0824 or Francis Fuja at 414-263-8749).

3. Prior to placing the booster station into service Elizabeth Spaeth-Werner (PH 414- 229-0824), of the Department's Southeast Region office, shall be contacted for approval to start-up.

4. A smooth-ended sample faucet shall be installed on the booster station discharge line.

5. Any surge tank installed below the ground surface shall have a pressure relief valve that releases air when the tank is over-pressurized. Submit manufacturer's drawings of each surge tank that will be installed below-grade. The drawings shall clearly show the location of the air relief valve relative to the position of the tank diaphragm. Also, the submittal shall indicate the pressure at which the air relief valve will be activated.

6. When the average demand (on a daily basis) in the service area approaches 200 gpm, the Utility shall submit an engineering report (along with plans and specifications) for an elevated tank. The Department will monitor flow rate data (as available from the SCADA system) during annual and sanitary survey inspections of the Village of Jackson Water Utility.

7. That the improvements be installed in accordance with the plans and specifications, and the above conditions, or subsequent essential and approved modifications. Note: Any changes to the booster station design to eliminate confined space entry requirements shall be submitted for Department review and approval.

The Department has the authority under ss. 281.19(1), 281.17(8) and 280.11, Statutes to adopt rules for the construction, installation, use, and operation of practicable and available systems and for obtaining drinking water for human consumption. Chapters NR 108, 110, and 811, Wis. Adm. Code, have been adopted by the Department pursuant to this statutory authority. The Department has the authority to approve, conditionally approve, or deny plans under s. 281.41, Statutes.

The plans and specifications have been reviewed in accordance with s. 281.41, Statutes for compliance with Chapters NR 108, 110 and 811, Wis. Adm. Code (or any other applicable section of the Wisconsin Administrative code or Statutes which may be specifically referenced in the conditions above). This letter should not be construed as an approval for activities requiring approval under other Statutes or by other federal, state or local agencies.

The Division reserves the right to order changes or additions should conditions arise making this necessary.

If you believe that you have a right to challenge this decision, you should know that Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed.

For judicial review of a decision pursuant to s. 227.52 and 227.53, Statutes, you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review shall name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to s. 227.42, Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. The filing of a request for a contested case hearing is not a prerequisite for judicial review and does not extend the 30-day period for filing a petition for judicial review.

This notice is provided pursuant to s. 227.48(2), Stats.

In case construction of this improvement has not commenced or contracts awarded to complete this improvement within two years from this date, this approval shall become void. After two years a new application and plan submittal must be made and approval obtained of this or other plans before any construction work is undertaken.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
For the Secretary

Robert A. Baumeister

Robert A. Baumeister, P.E., Chief
Public Water Systems Section
Bureau of Drinking Water & Groundwater

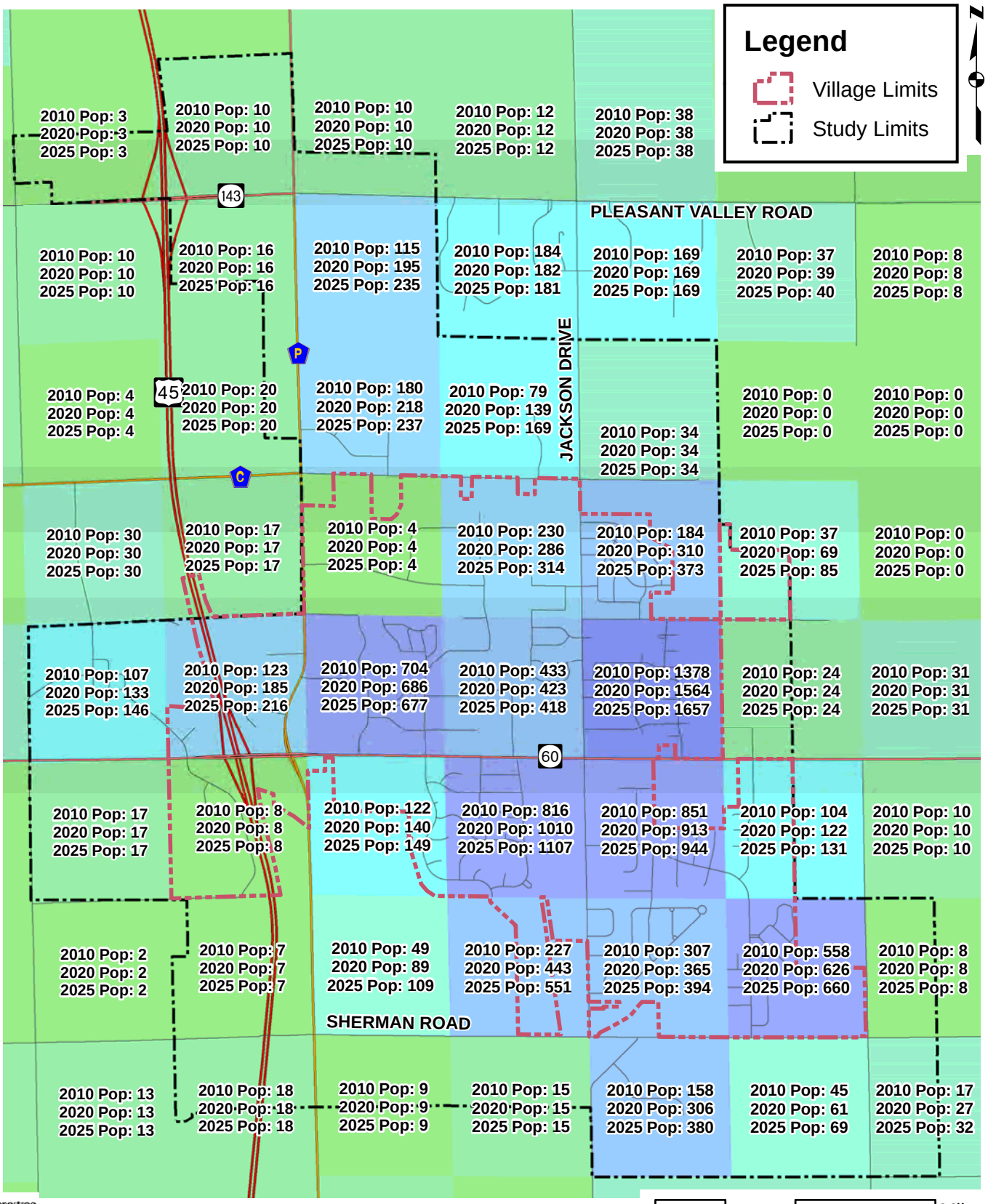
RAB:fgf

C: Paul Eiring, Graef, Anhalt & Schloemer and Associates, Inc
Marilyn Merten – Washington County Clerk
Public Service Commission
Elizabeth Spaeth-Werner – SER Richards St. Annex
Casefile

APPENDIX B

Map Document: (N:\841\84105119\Cad\GIS\mxd_projects\Population Projections 8-5 x 11.mxd)
4/24/2006 -- 4:54:49 PM

Figure B-1
2010, 2020 & 2025 Population Projections



Bonestroo Rosene Anderlik & Associates
Engineers & Architects

Source: Southeastern Wisconsin Regional Planning Commission

APPENDIX C

Table C-1
WATER CONSUMPTION 1998-2004
VILLAGE OF JACKSON

Year	Annual Water Sales						Total Sales	Total Pumped	%Pumpage Metered
	Commercial	Govern-mental	Industrial	Residential	Accounted for losses	Un-accounted for			
1998	25.7	2.2	51.4	91	16.66	4.5	170.19	180.06	94.52%
1999	25.9	6.4	50.5	92	13.49	2.8	174.80	182.99	95.52%
2000	31.3	2.3	40.7	96	15.37	3.6	170.38	180.49	94.40%
2001	30.1	2.2	39.7	100	13.07	8.5	171.52	184.61	92.91%
2002	33.7	1.8	33.5	111	15.39	15.2	180.09	200.63	89.76%
2003	37.2	2.8	30.2	115	12.77	27.1	184.81	278.25	66.42%
2004	35.0	1.9	26.3	110	10.99	27.8	173.53	216.06	80.32%
Total	218.8	19.6	272.4	715	97.74	89.51	1,412.56	1,423.07	99.26%

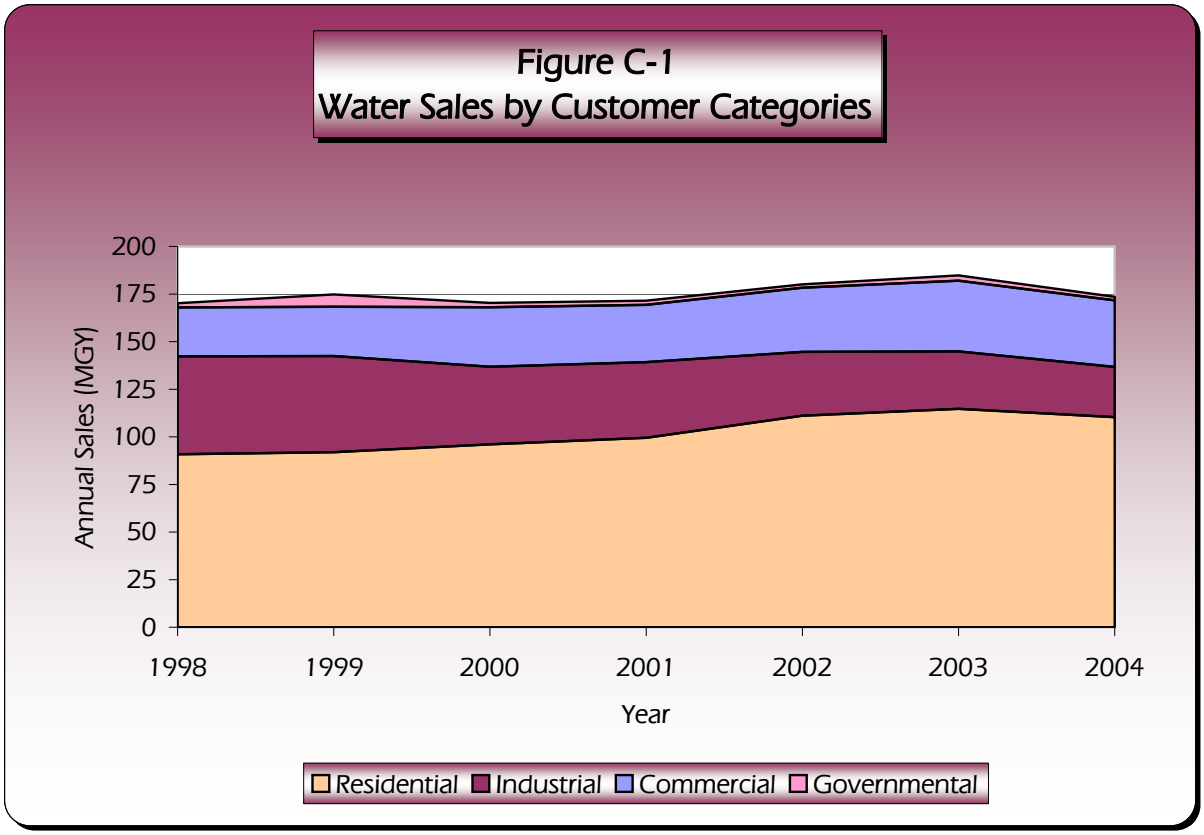


Figure C-2
Water Pumped
1995-2004

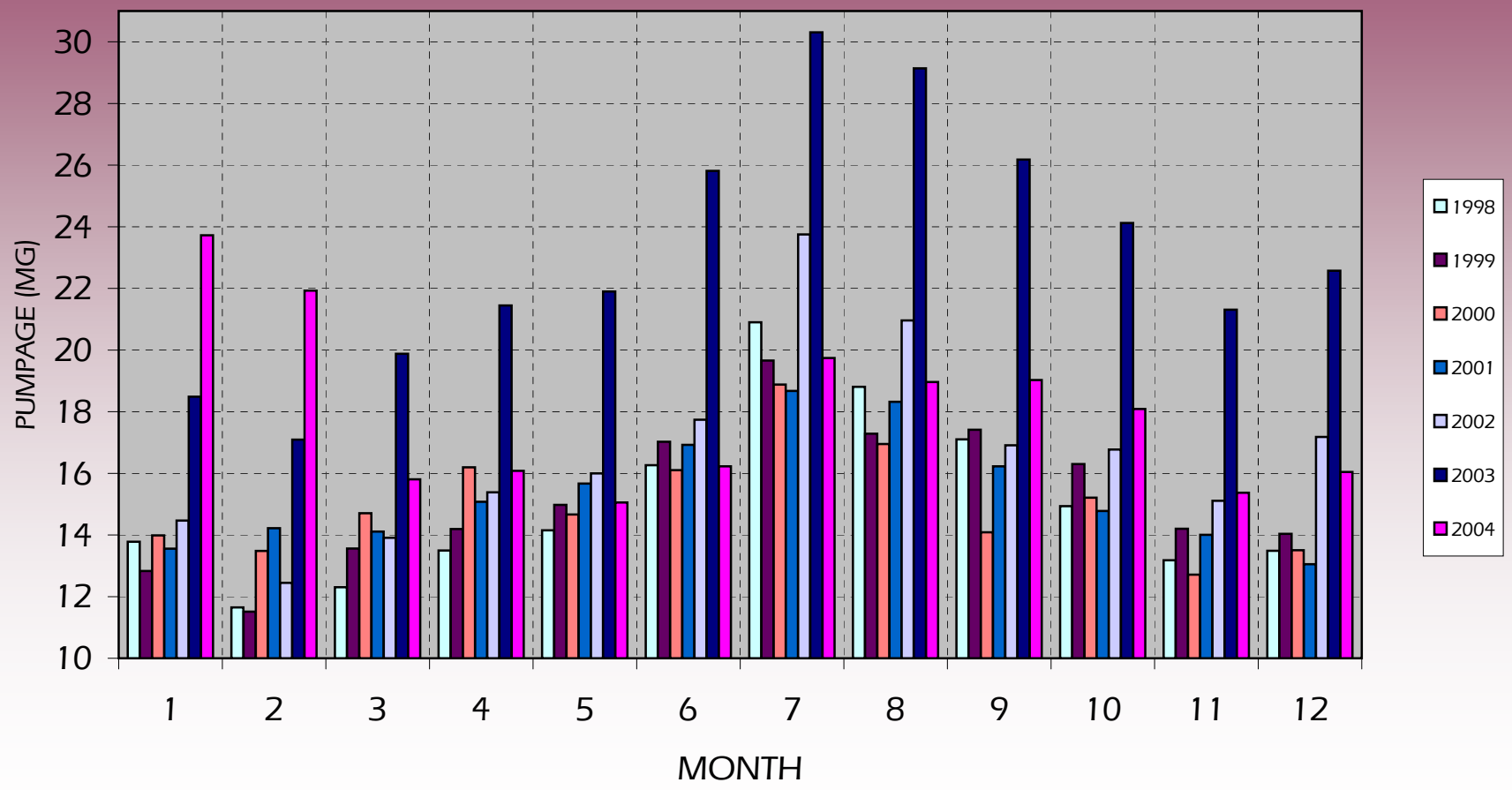


Table C-2
Pumping and Demand Variations
Village of Jackson

Month	Million Gallons Pumped						
	1998	1999	2000	2001	2002	2003	2004
Jan	13.78	12.83	13.986	13.556	14.468	18.485	23.724
Feb	11.651	11.512	13.481	14.221	12.446	17.092	21.928
Mar	12.306	13.559	14.705	14.111	13.908	19.881	15.806
Apr	13.494	14.193	16.196	15.078	15.384	21.444	16.079
May	14.151	14.977	14.665	15.668	15.998	21.898	15.054
Jun	16.262	17.023	16.104	16.924	17.741	25.815	16.227
Jul	20.899	19.66	18.882	18.672	23.753	30.307	19.741
Aug	18.807	17.284	16.95	18.32	20.962	29.138	18.962
Sep	17.101	17.412	14.089	16.227	16.91	26.179	19.029
Oct	14.936	16.3	15.209	14.778	16.772	24.124	18.089
Nov	13.182	14.2	12.711	14.006	15.108	21.308	15.371
Dec	13.487	14.037	13.507	13.052	17.18	22.575	16.045
Total	180.056	182.987	180.485	184.613	200.63	278.246	216.055
Max. Month (MGD)	0.674	0.634	0.609	0.602	0.766	0.978	0.765
Min. Month (MGD)	0.397	0.411	0.424	0.421	0.445	0.610	0.486
Max day (MGD)	0.946	0.880	0.986	0.927	1.158	1.353	0.951
Max day (date)	27-Jul	8-Jul	20-Jul	7-Aug	1-Jul	14-Jul	7-Feb
Avg. day (MGD)	0.493	0.501	0.493	0.506	0.550	0.762	0.590
Max day/ avg day	1.918	0.501	0.493	0.506	0.550	0.762	0.590
Max month/ avg day	0.805	0.820	0.859	0.832	0.809	0.801	0.823

Watermain break that started in December of 2002 and wasn't found and repaired until February of 2004.

Table C-3

Per Capita Water Demand

Village of Jackson

Year	Estimated Population	gpd/cap		
		Residential	Total	Max. Day
1998	4,496	55.37	109.72	210.41
1999	4,747	53.05	105.61	185.38
2000	4,998	52.67	98.94	197.28
2001	5,175	52.69	97.73	179.12
2002	5,352	56.71	102.70	216.35
2003	5,530	56.83	137.86	244.68
2004	5,707	52.99	103.72	166.64
	AVG.	54.33	108.04	199.98

APPENDIX D

Table D-1 Pumpage records 1998 to 2005 per well per month

	Well #1	Well #2	Well #3	Well #4	1998	Total Gal			Well #1	Well #2	Well #3	Well #4	1999	Total Gal
	3182	691	9906		Jan	13779			3315	810	4708	5152	Jan	13985
	4712	1931	5007		Feb	11650			3192	534	5639	4115	Feb	13480
	2805	3841	5659		Mar	12305			3687	670	7242	3105	Mar	14704
	3701	3741	6051		Apr	13493			3767	889	8024	3514	Apr	16194
	4096	3701	6871		May	14668			4329	625	7151	2558	May	14663
	4905	3697	7659		Jun	16261			3551	705	8352	3494	Jun	16102
	4035	3808	10313	2741	Jul	20897			4302	852	9849	3878	Jul	18881
	2877	3796	5949	6182	Aug	18804			3703	707	8795	3744	Aug	16949
	2381	3575	7599	3545	Sep	17100			4225	501	6534	2827	Sep	14087
	2487	3587	5715	3146	Oct	14935			4600	492	5881	4235	Oct	15208
	2132	3480	5013	2556	Nov	13181			3196	252	6656	2605	Nov	12709
	3025	2566	5646	2248	Dec	13485			3399	485	7125	2497	Dec	13506
Total	40338	38414	81388	20418		180558		Total	45266	7522	85956	41724		180468

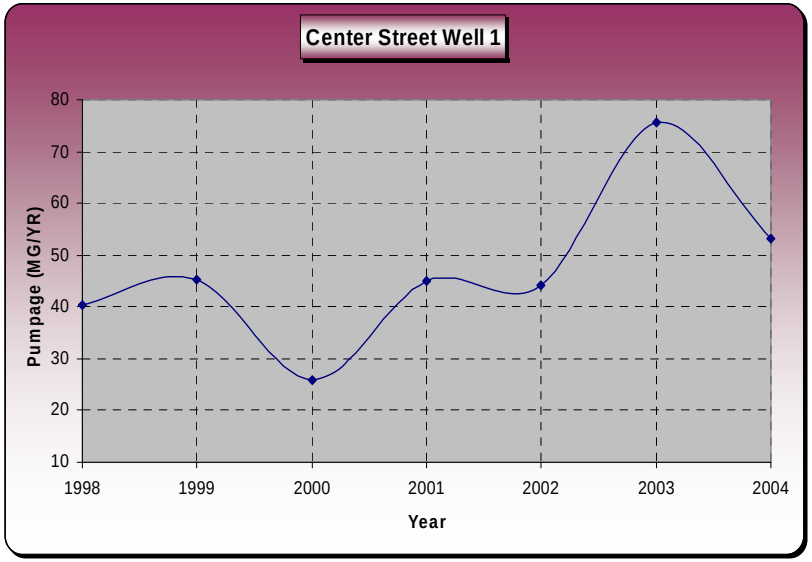
	Well #1	Well #2	Well #3	Well #4	2000	Total Gal			Well #1	Well #2	Well #3	Well #4	2001	Total Gal
	3031	665	6442	2690	Jan	12828			4087	530	6007	2643	Jan	13267
	3620	934	2055	4904	Feb	11513			3109	403	5473	2531	Feb	11516
	3936	996	3665	4961	Mar	13558			3740	572	6546	2371	Mar	13229
	2742	2605	6231	2613	Apr	14191			2966	549	7115	3273	Apr	13903
	2542	3631	6461	2341	May	14975			1802	617	8799	3511	May	14729
	3321	3365	7914	2422	Jun	17022			1018	3985	7883	3985	Jun	16871
	3151	3439	9341	3728	Jul	19659			4651	1028	10777	4177	Jul	20633
	549	116	10674	5944	Aug	17283			5988	992	9983	3546	Aug	20509
			10600	6811	Sep	17411			5206	679	7422	2904	Sep	16211
			9281	7019	Oct	16300			3642	487	7162	5206	Oct	16497
	919	413	7523	5344	Nov	14199			5022	537	5475	2980	Nov	14014
	2176	1018	7952	2889	Dec	14035			3840	508	6445	3271	Dec	14064
Total	25987	17182	88139	51666		182974		Total	45071	10887	89087	40398		185443

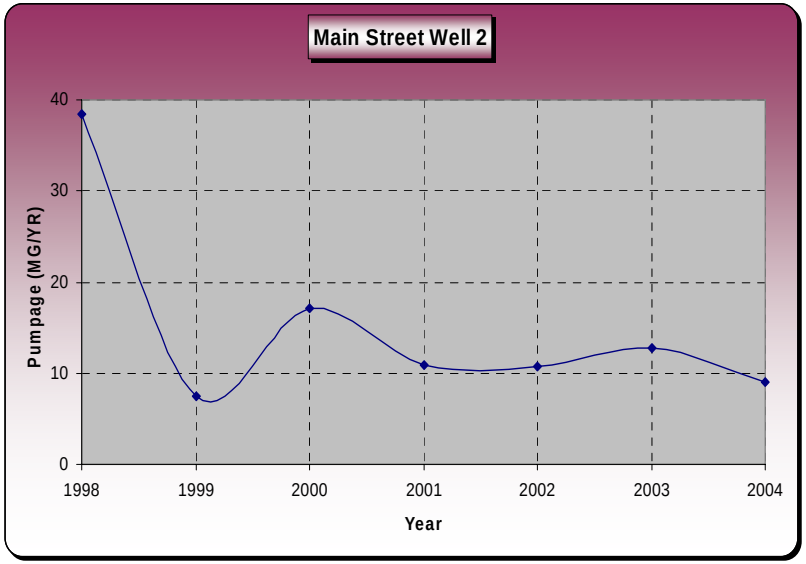
	Well #1	Well #2	Well #3	Well #4	2002	Total Gal			Well #1	Well #2	Well #3	Well #4	2003	Total Gal
	2065	326	6647	5430	Jan	14468			5302	896	5832	6455	Jan	18485
	2659	612	4854	4321	Feb	12446			4931	836	5077	6248	Feb	17092
	3834	842	5370	3862	Mar	13908			5713	955	5965	7248	Mar	19881
	4170	943	5042	5229	Apr	15384			5803	1032	5915	8694	Apr	21444
	4230	1095	5925	4748	May	15998			6350	1043	6879	7626	May	21898
	4567	1253	7043	4878	Jun	17741			7488	1254	8115	8958	Jun	25815
	5758	1429	9741	6825	Jul	23753			7552	1437	9300	12018	Jul	30307
	3788	837	7532	8805	Aug	20962			8427	1425	9056	10230	Aug	29138
	4161	717	4950	7082	Sep	16910			7329	1235	8366	9249	Sep	26179
	4859	840	4165	6908	Oct	16772			5689	956	6852	10627	Oct	24124
	1149	892	4802	8265	Nov	15108			5384	813	7114	7997	Nov	21308
	3021	1011	7297	5851	Dec	17180			5631	931	6981	9032	Dec	22575
Total	44261	10797	73368	72204		200630		Total	75599	12813	85452	104382		278246

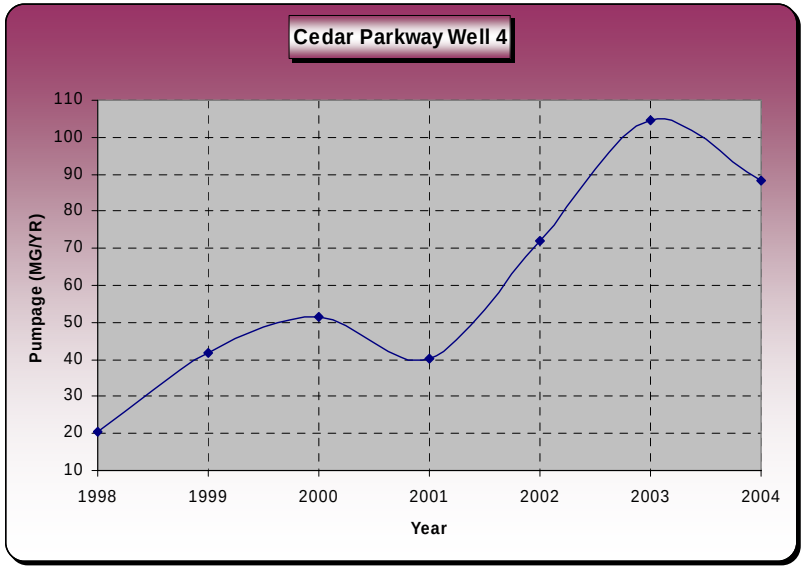
	Well #1	Well #2	Well #3	Well #4	2004	Total Gal			Well #1	Well #2	Well #3	Well #4	2005	Total Gal
	5906	992	7673	9153	Jan	23724			4055	652	4749	6629	Jan	16085
	4175	842	6629	10282	Feb	21928			3529	499	4257	5239	Feb	13524
	4154	670	4984	5998	Mar	15806			4085	659	5065	5210	Mar	15019
	4008	649	4225	7151	Apr	16033			4770	531	6280	5259	Apr	16840
	3801	658	4594	6001	May	15054			5372	804	8855	2243	May	17274
	4023	697	5010	6497	Jun	16227			6529	1018	9112	8001	Jun	24660
	5015	843	6259	7624	Jul	19741			5437	824	6822	10017	Jul	23100
	4797	788	5757	7620	Aug	18962			6012	1121	8161	8696	Aug	23990
	4814	798	5958	7459	Sep	19029			11013	1482	9418	0	Sep	21913
	4538	775	4872	7904	Oct	18089			7823	662	4851	6319	Oct	19655
	3574	680	4139	6978	Nov	15371			7413	698	3364	4564	Nov	16039
	4293	702	5353	5697	Dec	16045			3233	785	4546	6552	Dec	15116
Total	53098	9094	65453	88364		216009		Total	69271	9735	75480	68729		223215

* all totals are x 1000 Gallons

Table D-1
Annual Well Production







Village of Jackson Wells - 2006 Energy Usage Breakdown and Analysis

2006.08.01

Bonestroo, Rosene, Anderlik & Assoc.

Facility	Use Type	Electricity or Gas	Start - Act. Or Est.	Start Date	Start Reading	End - Act. Or Est.	End Date	End Reading	kWh Cons. or kW Demand	Therms (adj.)	Base Charges	Usage Charges	**Total Charges** -(and % of Elec.)	**1000 gals. Pumped**	**Electric Usage $ cost / 1000 gals.**	**Total $/1000**
Well 1	Total	E	a	12/17/2004	58,085	e	1/20/2005	66,161	8,076		$ 26.42	$ 675.56	$ 701.98			
Well 1	Total	G	a	12/1672004	1,315	a	1/19/2005	1,381		76	$ 15.00	$ 66.84	$ 81.84			
Well 1	Total	E	e	1/20/2005	66,161	a	2/18/2005	69,158	2,997		$ 26.42	$ 200.70	$ 227.12			
Well 1	Total	G	a	1/19/2005	1,381	a	2/17/2005	1,424	.	50	$ 15.00	$ 42.65	$ 57.65			
														3,915.0	$0.05	**$0.07**
Well 1	Total	E	a	2/18/2005	69,158	e	3/21/2005	75,719	6,561		$ 26.42	$ 551.65	$ 578.07			
Well 1	Total	G	a	2/17/2005	1,424	a	3/18/2005	1,469		51	$ 15.00	$ 42.60	$ 57.60			
														7,738.0	$0.11	**$0.13**
Well 1	Total	E	e	3/21/2005	75,719	a	4/18/2005	79,535	3,816		$ 26.42	$ 336.19	$ 362.61			
Well 1	Total	G	a	3/18/2005	1,469	a	4/19/2005	1,489	.	22	$ 15.00	$ 19.33	$ 34.33			
Well 1	Total	E	a	4/18/2005	79,535	e	5/19/2005	85,354	5,819		$ 26.42	$ 512.65	$ 539.07			
Well 1	Total	G	a	4/19/2005	1,489	a	5/20/2005	1,504		17	$ 15.00	$ 14.48	$ 29.48			
														11,392.0	$0.11	**$0.12**
Well 1	Total	E	e	5/19/2005	85,354	a	6/16/2005	93,878	8,524		$ 26.42	$ 772.35	$ 798.77			
Well 1	Total	G	a	5/20/2005	1,504	a	6/19/2005	1,504	.	-	$ 15.00	$ -	$ 15.00			
Well 1	Total	E	a	6/16/2005	93,878	e	7/20/2005	106,511	12,633		$ 27.35	$ 1,144.68	$ 1,172.03			
Well 1	Total	G	a	6/19/2005	1,504	e	7/19/2005	1,510		7	$ 15.00	$ 5.46	$ 20.46			
														11,679.0	$0.12	**$0.13**
Well 1	Total	E	e	7/20/2005	6,511	a	8/18/2005	9,467	2,956		$ 27.35	$ 267.85	$ 295.20			
Well 1	Total	G	a	7/19/2005	1,510	a	8/17/2005	1,512	.	2	$ 15.00	$ 1.65	$ 16.65			
Well 1	Total	E	a	8/18/2005	9,467	e	9/19/2005	16,303	6,836		$ 27.35	$ 619.41	$ 646.76			
Well 1	Total	G	a	8/17/2005	1,512	a	9/16/2005	1,516		4	$ 15.00	$ 3.78	$ 18.78			
														17,524.0	$0.11	**$0.11**
Well 1	Total	E	e	9/19/2005	16,303	a	10/14/2005	30,563	14,260		$ 27.35	$ 1,292.10	$ 1,319.45			
Well 1	Total	G	a	9/16/2005	1,516	a	10/17/2005	1,513	.	-	$ 15.00	$ (2.73)	$ 12.27			
Well 1	Total	E	a	10/14/2005	30,563	e	11/16/2005	37,765	7,202		$ 27.35	$ 652.57	$ 679.92			
Well 1	Total	G	a	10/17/2005	1,513	a	11/15/2005	1,513		-	$ 15.00	$ -	$ 15.00			
														14,353.0	$0.12	**$0.13**
Well 1	Total	E	e	11/16/2005	37,765	a	12/19/2005	49,722	11,957		$ 27.35	$ 1,088.04	$ 1,115.39			
Well 1	Total	G	a	11/15/2005	1,513	a	12/16/2005	1,539	.	30	$ 15.00	$ 35.15	$ 50.15			
Well 1	Total	E	a	12/19/2005	49,722	e	1/19/2006	55,943	6,221		$ 27.35	$ 566.85	$ 594.20			
Well 1	Total	G	a	12/16/2005	1,539	a	1/18/2006	1,581		48	$ 15.00	$ 55.05	$ 70.05			
														296.5	$0.41	**$1.03**
Well 1	Total	E	e	1/19/2006	55,943	a	2/15/2006	51,059	(4,884)		$ 19.78	$ (444.28)	$ (424.50)	*(2 months comb. due to est. meter read)*		
Well 1	Total	G	a	1/18/2006	1,581	a	2/16/2006	1,623		48	$ 9.39	$ 56.16	$ 65.55			
Well 1	Total	E	a	2/15/2006	51,059	e	3/20/2006	57,565	6,506		$ 22.93	$ 649.82	$ 672.75			
Well 1	Total	G	a	2/16/2006	1,623	a	3/17/2006	1,662		45	$ 7.25	$ 50.38	$ 57.63			
														6,191.8	$0.12	**$0.14**
Well 1	Total	E	e	3/20/2006	57,565	a	4/18/2006	58,507	942		$ 18.46	$ 94.09	$ 112.55	*(2 months comb. due to est. meter read)*		
Well 1	Total	G	a	3/17/2006	1,662	a	4/18/2006	1,681		21	$ 8.00	$ 22.65	$ 30.65			

Facility	Use Type	Electricity or Gas	Start - Act. Or Est.	Start Date	Start Reading	End - Act. Or Est.	End Date	End Reading	kWh Cons. or kW Demand	Therms (adj.)	Base Charges	Usage Charges	Total Charges -(and % of Elec.)		1000 gals. Pumped	Electric Usage $ cost / 1000 gals.	Total $/1000
Well 2	Total	E	e	1/20/2005	62,217	a	2/18/2005	62,639	422		$ 23.41	$ 35.30	$ 58.71				
Well 2	Total	G	a	1/19/2005	9,346	a	2/17/2005	9,418	.	74	$ 15.00	$ 63.12	$ 78.12				
															571.0	$0.06	**$0.24**
Well 2	Total	E	a	2/18/2005	62,639	e	3/21/2005	64,120	1,481		$ 26.09	$ 124.53	$ 150.62				
Well 2	Total	G	a	2/17/2005	9,418	a	3/18/2005	9,486		70	$ 15.00	$ 58.46	$ 73.46				
															1,265.0	$0.16	**$0.29**
Well 2	Total	E	e	3/21/2005	64,120	a	4/18/2005	64,959	839		$ 24.57	$ 73.92	$ 98.49				
Well 2	Total	G	a	3/18/2005	9,486	a	4/19/2005	9,525	.	39	$ 15.00	$ 34.26	$ 49.26				
Well 2	Total	E	a	4/18/2005	64,959	e	5/19/2005	66,284	1,325		$ 25.85	$ 116.73	$ 142.58				
Well 2	Total	G	a	4/19/2005	9,525	a	5/20/2005	9,549		24	$ 15.00	$ 20.43	$ 35.43				
															1,498.0	$0.17	**$0.24**
Well 2	Total	E	e	5/19/2005	66,284	a	6/16/2005	67,801	1,517		$ 26.42	$ 137.45	$ 163.87				
Well 2	Total	G	a	5/20/2005	9,549	a	6/19/2005	9,557	.	8	$ 15.00	$ 6.25	$ 21.25				
Well 2	Total	E	a	6/16/2005	67,801	e	7/20/2005	70,788	2,987		$ 27.35	$ 270.65	$ 298.00				
Well 2	Total	G	a	6/19/2005	9,557	e	7/19/2005	9,565		8	$ 15.00	$ 6.21	$ 21.21				
															1,777.0	$0.17	**$0.22**
Well 2	Total	E	e	7/20/2005	70,788	a	8/18/2005	71,177	389		$ 23.41	$ 35.25	$ 58.66				
Well 2	Total	G	a	7/19/2005	9,565	a	8/17/2005	9,571	.	6	$ 15.00	$ 4.98	$ 19.98				
Well 2	Total	E	a	8/18/2005	71,177	e	9/19/2005	72,994	1,817		$ 27.29	$ 164.64	$ 191.93				
Well 2	Total	G	a	8/17/2005	9,571	a	9/16/2005	9,579		8	$ 15.00	$ 7.56	$ 22.56				
															2,708.0	$0.17	**$0.21**
Well 2	Total	E	e	9/19/2005	72,994	a	10/14/2005	76,205	3,211		$ 27.35	$ 290.95	$ 318.30				
Well 2	Total	G	a	9/16/2005	9,579	a	10/17/2005	9,588	.	9	$ 15.00	$ 10.27	$ 25.27				
Well 2	Total	E	a	10/14/2005	76,205	e	11/16/2005	77,613	1,408		$ 26.18	$ 127.58	$ 153.76				
Well 2	Total	G	a	10/17/2005	9,588	a	11/15/2005	9,616		28	$ 15.00	$ 34.25	$ 49.25				
															1,267.0	$0.19	**$0.34**
Well 2	Total	E	e	11/16/2005	77,613	a	12/19/2005	78,787	1,174		$ 25.56	$ 106.84	$ 132.40				
Well 2	Total	G	a	11/15/2005	9,616	a	12/16/2005	9,687	.	72	$ 15.00	$ 84.35	$ 99.35				
Well 2	Total	E	a	12/19/2005	78,787	e	1/19/2006	80,173	1,386		$ 26.14	$ 126.29	$ 152.43				
Well 2	Total	G	a	12/16/2005	9,687	a	1/18/2006	9,764		78	$ 15.00	$ 89.45	$ 104.45				
															1,014.5	$0.18	**$0.42**
Well 2	Total	E	e	1/19/2006	80,173	a	2/16/2006	80,799	626		$ 18.42	$ 61.09	$ 79.51		*(2 months comb. due to est. meter read)*		
Well 2	Total	G	a	1/18/2006	9,764	a	2/16/2006	9,830		67	$ 9.39	$ 78.41	$ 87.80				
Well 2	Total	E	a	2/16/2006	80,799	e	3/20/2006	82,292	1,493		$ 22.27	$ 149.12	$ 171.39				
Well 2	Total	G	a	2/16/2006	9,830	a	3/17/2006	9,890		62	$ 7.25	$ 69.40	$ 76.65				
															1,257.9	$0.20	**$0.34**
Well 2	Total	E	e	3/20/2006	82,292	a	4/18/2006	83,357	1,065		$ 18.83	$ 106.37	$ 125.20		*(2 months comb. due to est. meter read)*		
Well 2	Total	G	a	3/17/2006	9,890	a	4/18/2006	9,929		39	$ 8.00	$ 42.06	$ 50.06				

Facility	Use Type	Electricity or Gas	Start - Act. Or Est.	Start Date	Start Reading	End - Act. Or Est.	End Date	End Reading	kWh Cons. or kW Demand	Therms (adj.)	Base Charges	Usage Charges	Total Charges -(and % of Elec.)		1000 gals. Pumped	Electric Usage $ cost / 1000 gals.	Total $/1000
Well 3					*(no gas at wellhouse)*												
Well 3	On-Peak Cons.	E	a	1/6/2005	71,577	a	2/7/2005	75,812	4,235			$ 269.73	24%				
Well 3	Peak Demand	E				a			79.60			$ 342.44	31%				
Well 3	Off-Peak Cons.	E	a			a			6,847			$ 436.09	39%				
Well 3	Total	E	a		80,018	a		91,100	11,082		$ 59.30	$ 1,048.26	$ 1,107.56		5,111.0	$0.21	**$0.22**
Well 3	On-Peak Cons.	E	a	2/7/2005	75,812	a	3/9/2005	79,706	3,894			$ 248.01	25%				
Well 3	Peak Demand	E				a			75.10			$ 321.28	32%				
Well 3	Off-Peak Cons.	E	a			a			5,880			$ 374.49	37%				
Well 3	Total	E	a		91,100	a		874	9,774		$ 59.30	$ 943.78	$ 1,003.08		4,745.0	$0.20	**$0.21**
Well 3	On-Peak Cons.	E	a	3/9/2005	79,706	a	4/6/2005	82,731	3,025			$ 201.79	23%				
Well 3	Peak Demand	E				a			75.00			$ 299.25	34%				
Well 3	Off-Peak Cons.	E	a			a			4,898			$ 326.74	37%				
Well 3	Total	E	a		874	a		8,797	7,932		$ 59.30	$ 827.78	$ 887.08		4,355.0	$0.19	**$0.20**
Well 3	On-Peak Cons.	E	a	4/6/2005	82,731	a	5/6/2005	87,166	4,435			$ 302.19	27%				
Well 3	Peak Demand	E				a			73.80			$ 329.89	30%				
Well 3	Off-Peak Cons.	E	a			a			6,195			$ 422.13	38%				
Well 3	Total	E	a		8,797	a		19,427	10,630		$ 59.30	$ 1,054.21	$ 1,113.51		7,369.0	$0.14	**$0.15**
Well 3	On-Peak Cons.	E	a	5/6/2005	87,166	a	6/6/2005	91,616	4,450			$ 306.09	25%				
Well 3	Peak Demand	E				a			69.50			$ 332.27	27%				
Well 3	Off-Peak Cons.	E	a			a			7,847			$ 539.75	44%				
Well 3	Total	E	a		19,427	a		31,724	12,297		$ 59.30	$ 1,178.11	$ 1,237.41		8,888.0	$0.13	**$0.14**
Well 3	On-Peak Cons.	E	a	6/6/2005	91,616	a	7/8/2005	97,232	5,616			$ 388.90	29%				
Well 3	Peak Demand	E				a			70.10			$ 372.94	28%				
Well 3	Off-Peak Cons.	E	a			a			7,298			$ 505.39	38%				
Well 3	Total	E	a		31,724	a		44,638	12,914		$ 62.25	$ 1,267.23	$ 1,329.48		8,652.0	$0.15	**$0.15**
Well 3	On-Peak Cons.	E	a	7/8/2005	97,232	a	8/4/2005	1,344	4,112			$ 284.76	27%				
Well 3	Peak Demand	E				a			69.90			$ 336.64	32%				
Well 3	Off-Peak Cons.	E	a			a			5,548			$ 384.20	36%				
Well 3	Total	E	a		44,638	a		54,298	9,660		$ 62.25	$ 1,005.60	$ 1,067.85		5,819.0	$0.17	**$0.18**
Well 3	On-Peak Cons.	E	a	8/4/2005	1,344	a	9/2/2005	5,994	4,650			$ 322.01	27%				
Well 3	Peak Demand	E				a			69.50			$ 348.07	29%				
Well 3	Off-Peak Cons.	E	a			a			6,551			$ 453.65	38%				
Well 3	Total	E	a		54,298	a		65,499	11,201		$ 62.25	$ 1,123.73	$ 1,185.98		8,529.0	$0.13	**$0.14**
Well 3	On-Peak Cons.	E	a	9/2/2005	5,994	a	10/4/2005	8,029	2,035			$ 140.92	10%				
Well 3	Peak Demand	E				a			69.60			$ 285.08	21%				
Well 3	Off-Peak Cons.	E	a			a			12,385			$ 857.66	64%				
Well 3	Total	E	a		65,499	a		79,919	14,420		$ 62.25	$ 1,283.66	$ 1,345.91		9,658.0	$0.13	**$0.14**
Well 3	On-Peak Cons.	E	a	10/4/2005	8,029	a	11/2/2005	8,714	685			$ 47.44	6%				
Well 3	Peak Demand	E				a			69.40			$ 252.62	34%				
Well 3	Off-Peak Cons.	E	a			a			5,397			$ 373.74	51%				
Well 3	Total	E	a		79,919	a		86,001	6,082		$ 62.25	$ 673.80	$ 736.05		3,927.0	$0.17	**$0.19**
Well 3	On-Peak Cons.	E	a	11/2/2005	8,714	a	12/6/2005	10,156	1,442			$ 99.90	10%				
Well 3	Peak Demand	E				a			68.50			$ 270.33	28%				
Well 3	Off-Peak Cons.	E	a			a			7,641			$ 529.38	55%				
Well 3	Total	E	a		86,001	a		95,084	9,083		$ 62.25	$ 899.61	$ 961.86		3,664.0	$0.25	**$0.26**
Well 3	On-Peak Cons.	E	a	12/6/2005	10,156	a	1/6/2006	12,833	2,677			$ 185.63	16%				
Well 3	Peak Demand	E				a	12/22/2005		74.70			$ 327.49	28%				
Well 3	Off-Peak Cons.	E	a	12/6/2005		a	1/6/2006		8,459			$ 586.54	50%				
Well 3	Total	E	a	12/6/2005	95,084	a	1/6/2006	6,220	11,136		$ 62.25	$ 1,099.66	$ 1,161.91		5,067.5	$0.22	**$0.23**
Well 3	On-Peak Cons.	E	a	1/6/2006	12,833	a	2/6/2006	16,622	3,789			$ 275.27	22%				
Well 3	Peak Demand	E				a	1/24/2006		74.60			$ 329.38	26%				
Well 3	Off-Peak Cons.	E	a	1/6/2006		a	2/6/2006		8,124			$ 590.21	47%				
Well 3	Total	E	a	1/6/2006	6,220	a	2/6/2006	18,133	11,913		$ 62.57	$ 1,194.86	$ 1,257.43		6,311.5	$0.19	**$0.20**
Well 3	On-Peak Cons.	E	a	2/6/2006	16,622	a	3/6/2006	20,298	3,676			$ 289.19	24%				
Well 3	Peak Demand	E				a	2/6/2006		79.40			$ 290.27	24%				
Well 3	Off-Peak Cons.	E	a	2/6/2006		a	3/6/2006		7,062			$ 555.57	47%		5,609.0	$0.10	**$0.21**
Well 3	Total	E	a	2/6/2006	18,133	a	3/6/2006	28,871	10,738		$ 58.56	$ 1,135.03	$ 1,193.59				
Well 3	On-Peak Cons.	E	a	3/6/2006	20,298	a	4/4/2006	24,742	4,444			$ 349.61	32%				
Well 3	Peak Demand	E				a	4/3/2006		75.70			$ 308.67	28%				
Well 3	Off-Peak Cons.	E	a	3/6/2006		a	4/4/2006		4,888			$ 384.54	35%		5,231.2	$0.07	**$0.21**
Well 3	Total	E	a	3/6/2006	28,871	a	4/4/2006	38,203	9,332		$ 60.08	$ 1,042.82	$ 1,102.90				

Facility	Use Type	Electricity or Gas	Start - Act. Or Est.	Start Date	Start Reading	End - Act. Or Est.	End Date	End Reading	kWh Cons. or kW Demand	Therms (adj.)	Base Charges	Usage Charges	Total Charges -(and % of Elec.)	1000 gals. Pumped	Electric Usage $ cost / 1000 gals.	Total $/1000
Well 4	On-Peak Cons.	E	a	12/15/2004	3,815	a	1/17/2005	3,899	6,720			$ 428.00	26%			
Well 4	Peak Demand	E				a			148.00			$ 608.28	36%			
Well 4	Off-Peak Cons.	E	a			a			9,040			$ 575.76	34%			
Well 4	Total	E	a		9,459	a		9,656	15,760		$ 59.30	$ 1,612.04	$ 1,671.34			
Well 4	Total	G	a		8,580	a		8,871		336	$ 15.00	$ 296.77	$ 311.77			
Well 4	On-Peak Cons.	E	a	1/17/2005	3,899	a	2/16/2005	3,971	5,760			$ 366.85	24%			
Well 4	Peak Demand	E				a			148.00			$ 586.97	38%			
Well 4	Off-Peak Cons.	E	a			a			8,480			$ 540.09	35%			
Well 4	Total	E	a		9,656	a		9,834	14,240		$ 59.30	$ 1,493.91	$ 1,553.21			
Well 4	Total	G	a		8,871	a		9,133		302	$ 15.00	$ 257.53	$ 272.53	6,340.0		**$0.29**
Well 4	On-Peak Cons.	E	a	2/16/2005	3,971	a	3/16/2005	4,020	3,920			$ 249.66	19%			
Well 4	Peak Demand	E				a			148.00			$ 540.79	40%			
Well 4	Off-Peak Cons.	E	a			a			7,760			$ 494.23	37%			
Well 4	Total	E	a		9,834	a		9,980	11,680		$ 59.30	$ 1,284.68	$ 1,343.98			
Well 4	Total	G	a		9,133	a		9,344		243	$ 15.00	$ 203.34	$ 218.34	4,924.0		**$0.32**
Well 4	On-Peak Cons.	E	a	3/16/2005	4,020	a	4/14/2005	4,069	3,920			$ 265.90	20%			
Well 4	Peak Demand	E				a			148.00			$ 540.79	40%			
Well 4	Off-Peak Cons.	E	a			a			6,960			$ 472.12	35%			
Well 4	Total	E	a		9,980	a		10,116	10,880		$ 59.30	$ 1,278.81	$ 1,338.11			
Well 4	Total	G	a		9,344	a		9,461		132	$ 15.00	$ 114.42	$ 129.42	4,301.0		**$0.34**
Well 4	On-Peak Cons.	E	a	4/14/2005	4,069	a	5/16/2005	4,128	4,720			$ 321.62	25%			
Well 4	Peak Demand	E				a			148.00			$ 562.10	44%			
Well 4	Off-Peak Cons.	E	a			a			4,800			$ 327.06	26%			
Well 4	Total	E	a		10,116	a		10,235	9,520		$ 59.30	$ 1,210.78	$ 1,270.08			
Well 4	Total	G	a		9,461	a		9,539		87	$ 15.00	$ 75.31	$ 90.31	3,464.0		**$0.39**
Well 4	On-Peak Cons.	E	a	5/16/2005	4,128	a	6/14/2005	4,189	4,880			$ 337.38	23%			
Well 4	Peak Demand	E				a			145.60			$ 608.28	42%			
Well 4	Off-Peak Cons.	E	a			a			6,480			$ 447.99	31%			
Well 4	Total	E	a		10,235	a		10,377	11,360		$ 59.30	$ 1,393.65	$ 1,452.95			
Well 4	Total	G	a		9,539	a		9,544		6	$ 15.00	$ 4.71	$ 19.71	5,088.0		**$0.29**
Well 4	On-Peak Cons.	E	a	6/14/2005	4,189	a	7/15/2005	4,301	8,960			$ 620.47	28%			
Well 4	Peak Demand	E				a			144.00			$ 703.87	31%			
Well 4	Off-Peak Cons.	E	a			a			12,400			$ 858.70	38%			
Well 4	Total	E	a		10,377	a		10,644	21,360		$ 62.25	$ 2,183.04	$ 2,245.29			
Well 4	Total	G	a		9,544	a		9,547		3	$ 15.00	$ 2.33	$ 17.33	9,807.0		**$0.23**
Well 4	On-Peak Cons.	E	a	7/15/2005	4,301	a	8/15/2005	4,401	8,000			$ 554.00	24%			
Well 4	Peak Demand	E				a			144.00			$ 683.14	30%			
Well 4	Off-Peak Cons.	E	a			a			13,920			$ 963.96	43%			
Well 4	Total	E	a		10,644	a		10,918	21,920		$ 62.25	$ 2,201.10	$ 2,263.35			
Well 4	Total	G	a		9,547	a		9,575		31	$ 15.00	$ 25.50	$ 40.50	10,056.0		**$0.23**
Well 4	On-Peak Cons.	E	a	8/15/2005	4,401	a	9/14/2005	4,464	5,040			$ 349.03	25%			
Well 4	Peak Demand	E				a			143.20			$ 607.17	43%			
Well 4	Off-Peak Cons.	E	a			a			5,760			$ 398.88	28%			
Well 4	Total	E	a		10,918	a		11,053	10,800		$ 62.25	$ 1,355.08	$ 1,417.33			
Well 4	Total	G	a		9,575	a		9,578		3	$ 15.00	$ 2.80	$ 17.80	4,006.0		**$0.36**
Well 4	On-Peak Cons.	E	a	9/14/2005	4,464	a	10/13/2005	4,474	800			$ 55.39	10%			
Well 4	Peak Demand	E				a			40.80			$ 158.30	29%			
Well 4	Off-Peak Cons.	E	a			a			4,000			$ 277.00	50%			
Well 4	Total	E	a		11,053	a		11,113	4,800		$ 62.25	$ 490.69	$ 552.94			
Well 4	Total	G	a		9,578	a		9,584		7	$ 15.00	$ 7.83	$ 22.83	1,542.0		**$0.37**
Well 4	On-Peak Cons.	E	a	10/13/2005	4,474	a	11/11/2005	4,505	2,480			$ 171.74	11%			
Well 4	Peak Demand	E				a			139.20			$ 533.41	35%			
Well 4	Off-Peak Cons.	E	a			a			10,960			$ 758.97	50%			
Well 4	Total	E	a		11,113	a		11,281	13,440		$ 62.25	$ 1,464.12	$ 1,526.37			
Well 4	Total	G	a		9,584	a		9,756		193	$ 15.00	$ 237.16	$ 252.16	6,371.0		**$0.28**
Well 4	On-Peak Cons.	E	a	11/11/2005	4,505	a	12/14/2006	4,521	1,280			$ 88.71	6%			
Well 4	Peak Demand	E				a			140.00			$ 516.42	36%			
Well 4	Off-Peak Cons.	E	a			a			11,120			$ 770.66	54%			
Well 4	Total	E	a		11,281	a		11,436	12,400		$ 62.25	$ 1,375.79	$ 1,438.04			
Well 4	Total	G	a		9,756	a		9,974		249	$ 15.00	$ 293.08	$ 308.08	5,290.0		**$0.33**
Well 4	On-Peak Cons.	E	a	12/14/2005	4,521	a	1/16/2006	4,572	4,080			$ 282.91	15%			
Well 4	Peak Demand	E				a	1/10/2006		140.80			$ 593.61	31%			
Well 4	Off-Peak Cons.	E	a	12/14/2005		a	1/16/2006		14,320			$ 992.95	51%	8,386.0	$0.12	**$0.26**
Well 4	Total	E	a	12/14/2005	11,436	a	1/16/2006	11,666	18,400		$ 62.25	$ 1,869.47	$ 1,931.72			
Well 4	Total	G	a	12/14/2005	9,974	a	1/16/2006	10,180		235	$ 15.00	$ 269.32	$ 284.32			
Well 4	On-Peak Cons.	E	a	1/16/2006	4,572	a	2/14/2006	4,630	4,640			$ 350.10	19%			
Well 4	Peak Demand	E				a	1/16/2006		140.00			$ 504.79	28%			
Well 4	Off-Peak Cons.	E	a	1/16/2006		a	2/14/2006		11,680			$ 881.28	49%	7,358.5	$0.12	**$0.28**
Well 4	Total	E	a	1/16/2006	11,666	a	2/14/2006	11,870	16,320		$ 60.83	$ 1,736.17	$ 1,797.00			
Well 4	Total	G	a	1/16/2006	10,180	a	2/14/2006	10,364		210	$ 9.92	$ 245.88	$ 255.80			
Well 4	On-Peak Cons.	E	a	2/14/2006	4,630	a	3/16/2006	4,692	4,960			$ 390.20	26%			
Well 4	Peak Demand	E				a	2/14/2006		140.80			$ 464.47	30%			
Well 4	Off-Peak Cons.	E	a	2/14/2006		a	3/16/2006		7,760			$ 610.48	40%	5,473.0	$0.11	**$0.33**
Well 4	Total	E	a	2/14/2006	11,870	a	3/16/2006	12,029	12,720		$ 61.61	$ 1,465.15	$ 1,526.76			
Well 4	Total	G	a	2/14/2006	10,364	a	3/16/2006	10,585		254	$ 7.50	$ 284.89	292.39			
Well 4	On-Peak Cons.	E	a	3/16/2006	4,692	a	4/13/2006	4,701	720			$ 56.64	4%			
Well 4	Peak Demand	E				a	4/7/2006		14.40			$ 54.52	4%			
Well 4	Off-Peak Cons.	E	a	3/16/2006		a	4/13/2006		15,040			$ 1,183.20	87%	5,657.8	$0.21	**$0.24**
Well 4	Total	E	a	3/16/2006	12,029	a	4/13/2006	12,226	15,760		$ 58.56	$ 1,294.36	$ 1,352.92			
Well 4	Total	G			*(no gas bill provided)*											

Appleton

CORPORATE
2400 Holly Road Neenah, WI 54956
Tel: 920.734.1601 Fax: 920.734.1622

BRANCH
6510 Aurora Road West Bend, WI 53090
Tel: 262.299.1601 Fax: 262.299.1622

PROPOSAL

PROPOSAL #:
PROPOSAL DATE: 11/07/13
CUSTOMER #:

CLIENT	JOB LOCATION
Brian W. Kober **Village of Jackson** PO Box 637 Jackson WI 53037 Ph: (262) 677-9001 Fx: (262) 677-9710 E: dirpubwks @ villageofjackson.com	Brian W. Kober **Village of Jackson** Main St/Cedar Pkwy Jackson WI 53037 Ph: (262) 677-9001 Fx: (262) 677-9710 E: dirpubwks @ villageofjackson.com

QTY	DESCRIPTION	TAX	UNIT PRICE	TOTAL
	Permit fee: Billed at cost per municipality — List municipality here (if known) or delete	N		$ -
	Permit fee: Billed at cost per municipality — List municipality here (if known) or delete	N		$ -
	Permit obtainment and processing	Y		$ -
1	Produce new bolt for existing monument sign.		$ 7,550.00	$ 7,550.00
	First trip:			$ -
	Excavate 6' x 6' x 6' footing, haul away spoils.			$ -
	Set bolt cage, pour concrete.			$ -
	Second trip:			$ -
	Load existing monument sign, haul to site.			$ -
	Install monument sign on new bolt cage.			$ -
				$ -
	***DIGGERS & PRIVATE UTILTIES LOCATE BY VILLAGE of JACKSON			$ -
	***ELECTRICAL HOOKUP BY VILLAGE of JACKSON			$ -
				$ -
	OPTION: APPROXIMATE MONTHLY PYMT — RATE CHART 0.0435 — # OF PYMTS 36 — PER MONTH $ 328.43			

TERMS
- ☐ Prepay
- ☐ 50% down; Balance prior to shipment/installation
- ☐ Monthly payment* (subject to credit approval)
- ☐ Other - Requires approval; Describe or delete

Estimated lead time to ship/install your order is 6 weeks.

SUBTOTAL NON-TAXABLE	$ -
SUBTOTAL TAXABLE	$ 7,550.00
TAX RATE	
SALES TAX	$ -
FREIGHT	$ -
TOTAL	$ 7,550.00

The prices, specifications, terms and conditions contained herein are satisfactory and hereby accepted.
Appleton Sign Company is authorized to do the work as described. Payment will be made in accordance with the terms herein.

Accepted for Appleton Sign _____

Sales Consultant (Print) _____

Date _____

Client Signature _____

Client Name (Print) VILLAGE OF JACKSON BRIAN W. KOBER

Date 11/8/2013

Appleton

CORPORATE
2400 Holly Road Neenah, WI 54956
Tel: 920.734.1601 Fax: 920.734.1622

BRANCH
6510 Aurora Road West Bend, WI 53090
Tel: 262.299.1601 Fax: 262.299.1622

Scope of Work

PROPOSAL #:
PROPOSAL DATE: 11/07/13
CUSTOMER #:

CLIENT	JOB LOCATION
Brian W. Kober **Village of Jackson** PO Box 637 Jackson WI 53037 Ph: (262) 677-9001 Fx: (262) 677-9710 E: dirpubwks @ villageofjackson.com	Brian W. Kober **Village of Jackson** Main St/Cedar Pkwy Jackson WI 53037 Ph: (262) 677-9001 Fx: (262) 677-9710 E: dirpubwks @ villageofjackson.com

THIS SCOPE OF WORK INCLUDES:

Produce new bolt for existing monument sign.

First trip:
Excavate 6' x 6' x 6' footing, haul away spoils.
Set bolt cage, pour concrete.

Second trip:
Load existing monument sign, haul to site.
Install monument sign on new bolt cage.

***DIGGERS & PRIVATE UTILTIES LOCATE BY VILLAGE of JACKSON

***ELECTRICAL HOOKUP BY VILLAGE of JACKSON

Sign project will be placed into production after receipt of all of the following: 1) signed proposal acceptance, 2) signed drawing approval, 3) down payment, and 4) permit approval. Approximately one week after receipt of these requirements, an estimated completion date will be communicated to the Client.

Any alteration or deviation from the above specifications will be executed only upon written change order(s), and may become an extra charge, to be paid by the Client, over and above the proposal amount.

Proposal amount based on planned-for materials and equipment. Final price may vary based on soil conditions, readiness of the site for all signs at once, clear unhindered access to site, no union-related costs, freight, rush projects, additional repairs, etc. No primary wiring, electrical hookup, engineering or inspections of any kind are included or implied except as described herein. All signs are wired at 120 volts unless otherwise specified in writing.

This proposal does not become effective until signed and dated by Appleton Sign Company and may be withdrawn if not accepted within sixty (60) days. Appleton Sign Company shall also be entitled to withdraw any proposal presented in error if evidence of a typographical, pricing and/or similar error is discovered that would significantly change the scope of work, price or other material portion of the proposal. In such instance as a proposal is withdrawn, Appleton Sign Company shall present a revised proposal. Client has no obligation to accept any revised proposal.

Appropriate sales tax will be applied to all orders. If your business or organization is tax exempt, please provide a current Sales and Use Tax Exemption Certificate.

ASC REP INITIALS _____

CLIENT INITIALS BWK

Appleton

CORPORATE
2400 Holly Road Neenah, WI 54956
Tel: 920.734.1601 Fax: 920.734.1622

BRANCH
6510 Aurora Road West Bend, WI 53090
Tel: 262.299.1601 Fax: 262.299.1622

Terms & Conditions

PROPOSAL #:
PROPOSAL DATE: 11/07/13
CUSTOMER #:

TERMS AND CONDITIONS

1. Both parties hereto agree and understand that the title to said sign, together with all property furnished pursuant to this Agreement, shall remain in Appleton Sign Company's possession until paid for in full. It is further agreed and understood that until this Agreement is paid in full, that said sign, together with any additions thereto, shall at all times be deemed personal property and shall not by reason of attachment or connection to any realty be deemed or become a fixture of appurtenance to such realty. Said sign shall be servable and removable from any realty in accordance with the provisions of this Agreement.

2. The Client shall have full responsibility for any parts and materials on its premises, or premises that Client will be occupying, and for the value of all services provided by Appleton Sign Company in respect thereto. At all times subsequent to delivery of any parts and materials to premises, the Client shall be fully liable for any damage or loss, whether or not said parts and materials are covered by insurance, and will not affect the rights of Appleton Sign Company to enforce the purchase price then unpaid.

3. The Client shall secure all necessary permits from the building owner, and/or others whose permission is required for the installation of the sign and said Client shall be liable for any obstruction of delivery due to delay in obtaining such permission, and if Client executes this contract of sale without ever obtaining permission from party or parties necessary for the installation of said sign, then Client purchases same and is bound to the terms and conditions of this contract as though Client had obtained said permission and Client agrees to relieve Appleton Sign Company from any liability for its failure within ten (10) days of delivery to erect or install said sign.

4. All sizes, dimensions, and elevations as shown on drawing(s) are an approximation only and are subject to variation based upon field measurements and standard component dimensions. Client agrees to provide service feed wire of suitable capacity and approved to location of display in advance of installation, and make connection thereof to display.

5. During the period in which construction and erection of said sign is in progress, Appleton Sign Company agrees to have its workers covered by worker's compensation insurance and further agrees to carry liability and property damage insurance covering injuries to or death of persons and damage to property as a result of accidents for which Appleton Sign Company is responsible. Insurance certificates will be furnished upon request.

6. Appleton Sign Company shall not be held responsible for delays due to accidents, strikes, war, natural disasters, inclement weather, or any other delays beyond our control.

7. When pier drilling is necessary, Appleton Sign Company will contact Digger's Hotline to locate public utilities. Location of private utilities is the sole responsibility of the Client. In the event poor ground conditions are encountered in the drilling process, to the point where special equipment is required, the Client may incur additional charges.

8. In the event building, soil, underground or overhead conditions or obstructions are encountered which impair installation of said sign, Client agrees to pay for all additional costs of installation attributed to such conditions or obstructions.

9. Appleton Sign Company will make repairs to walls, roof and roof coverings opened by Appleton Sign Company during installation of said sign. In making such repairs, Appleton Sign Company does not assume responsibility for re-bonding roof coverings installed by others.

10. All materials are to be as specified or of similar quality. All work will be completed in a workmanlike manner according to standard practices. Appleton Sign Company provides a limited warranty on sign products. This warranty covers ballasts, transformers and original workmanship for one (1) year from the original invoice date. Labor to replace ballasts and transformers will be warranted for ninety (90) days from the original invoice date. Lamps of any type and the labor to replace those lamps will be warranted for ninety (90) days from the original invoice date. This warranty excludes all damages caused by natural acts or vandalism. Unless otherwise agreed in writing, all warranties are null and void if final invoice is not paid within forty five (45) days from invoice date and/or if any service/maintenance work is performed and/or modifications are made to sign(s) or component(s) by any company or agent other than Appleton Sign Company.

11. Upon default for the payment of any sums herein agreed, Appleton Sign Company may, at its option, declare the balance fully due and payable without further notice to Client; and Client agrees to pay interest on said balance, when declared due at the rate of 1.5% per month on the unpaid balance, 18% annual rate. Client further agrees to pay all reasonable costs of collection of said balance incurred by Appleton Sign Company, including reasonable attorney's fees and court costs.

12. This document constitutes the entire Agreement and understanding between both parties and shall not be considered modified, altered, changed, or amended in any respect except as provided herein, unless in writing and signed by the duly authorized officers, employees, or owners of each party.

13. The invalidity or unenforceability of any particular provision of this Agreement shall not affect any other remaining provision(s) hereof and this Agreement shall be construed in all respects as if such invalid ur unenforceable provision(s) were omitted.

14. Both parties agree that any suits brought pursuant to this Agreement shall be brought in the courts of Winnebago County, Wisconsin.

15. To preserve our rights in the event of non-payment or delinquency as required under the Wisconsin Construction Lien Law, Appleton Sign Company (claimant) hereby notifies Client (owner) that persons or companies performing, furnishing, or procuring labor, services, materials, plans, or specifications for the construction on owner's land may have lien rights on owner's land and buildings if not paid.

16. Any payment/financing option is via a third party and Client will be subject to application, approval and additional terms and conditions with said third party. Any project contingent on third party financing shall not commence on approval or anticipated approval. Appleton Sign Company must be in receipt of all monies due prior to commencing work.

ASC REP INITIALS _____

CLIENT INITIALS BOK

Appleton

CORPORATE
2400 Holly Road Neenah, WI 54956
Tel: 920.734.1601 Fax: 920.734.1622

BRANCH
6510 Aurora Road West Bend, WI 53090
Tel: 262.299.1601 Fax: 262.299.1622

DEPOSIT INVOICE

INVOICE #: DP
INVOICE DATE: 11/07/13
CUSTOMER #:

CLIENT	JOB LOCATION
Brian W. Kober **Village of Jackson** PO Box 637 Jackson WI 53037 Ph: (262) 677-9001 Fx: (262) 677-9710 E: dirpubwks @ villageofjackson.com	Brian W. Kober **Village of Jackson** Main St/Cedar Pkwy Jackson WI 53037 Ph: (262) 677-9001 Fx: (262) 677-9710 E: dirpubwks @ villageofjackson.com

ORDERED BY	PO NUMBER	SALES REP	ORDER DATE	TERMS	DUE DATE
Brian W. Kober		Dave Fischer	11/07/13	Per Proposal	11/07/13

QTY	DESCRIPTION	TAX	UNIT PRICE	TOTAL
	Permit fee: Billed at cost per municipality List municipality here (if known) or delete	N	$ -	$ -
	Permit fee: Billed at cost per municipality List municipality here (if known) or delete	N	$ -	$ -
	Permit obtainment and processing	Y	$ -	$ -
1	Produce new bolt for existing monument sign.		$ 7,550.00	$ 7,550.00
	First trip:		$ -	$ -
	Excavate 6' x 6' x 6' footing, haul away spoils.		$ -	$ -
	Set bolt cage, pour concrete.		$ -	$ -
	Second trip:		$ -	$ -
	Load existing monument sign, haul to site.		$ -	$ -
	Install monument sign on new bolt cage.		$ -	$ -
			$ -	$ -
	***DIGGERS & PRIVATE UTILTIES LOCATE BY VILLAGE of JACKSON		$ -	$ -
	***ELECTRICAL HOOKUP BY VILLAGE of JACKSON		$ -	$ -

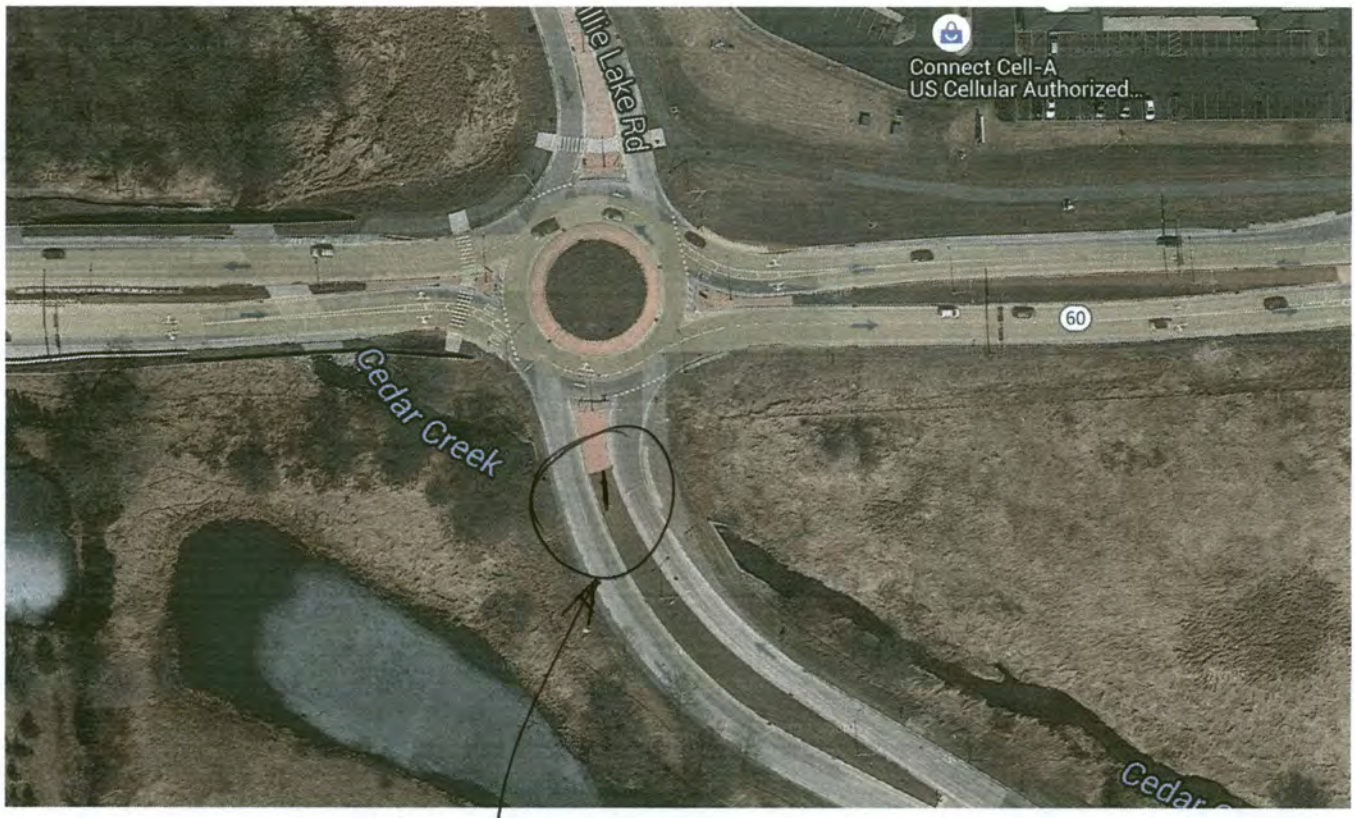
Proposal amount based on planned-for materials and equipment. Final price may vary based on soil conditions, readiness of the site for all signs at once, clear unhindered access to the site, no union-related costs, freight, rush projects, additional repairs, etc. No electrical work, hookup, engineering or inspections of any kind are included or implied.

SUBTOTAL NON-TAXABLE	$ -
SUBTOTAL TAXABLE	$ 7,550.00
TAX RATE	0.0%
SALES TAX	$ -
FREIGHT	$ -
Final invoice amount may vary upon completion TOTAL	$ 7,550.00
PLEASE PAY THIS DEPOSIT AMOUNT	$ 3,775.00

100-00-51810

Brock

13
SE
Tillie Lake Rd
Cedar Pkwy
24
NE
40.45'
140.29
225.2
Cedar Creek
N
0
20
40
60ft
DISCLAIMER: This map is not guaranteed to be accurate, correct, current, or complete and conclusions drawn are the responsibility of the user.



PROPOSED LOCATION

N
SIGN LOCATION
Mayfield Rd
NW
NE
Mayfield Ct
13
Polk St
Water St
SW
Tilly Lake
SE
Tillie Lake Rd
Cedar Creek
Tillie Lake Ct
45
60
Apple La
Diana Dr
Sylvester Cir
Green Valley Dr
Rosewood La
SW
Hasmer Lake
Hasmer Lake Access
Northwest Passage St
NW
NE
Emery Way
Green Valley Dr
18
SE
Tower Dr
Industrial Dr
Meadow La
N Center St
Scot Ct
Western Av
Reynolds Av
South St
Glen Brooke Dr
Parkway Dr
NE
Glencoe La
Tartan Ct
Dunbar Ct
19
NW
NE
Sysco Dr
Cedar Pkwy
P
0
1000
1500ft
DISCLAIMER: This map is not guaranteed to be accurate, correct, current, or complete and conclusions drawn are the responsibility of the user.

we energies

245 Sand Dr.
West Bend, WI 53095-5448
phone 262-338-7600 800-268-2060
fax 262-338-7646
www.we-energies.com

May 19, 2015

Village of Jackson -BRIAN KOBER
Po Box 637
Jackson, WI 53037-0000

THIS LETTER IS YOUR INVOICE FOR ELECTRIC SERVICE
W226N16780 Cedar Pkwy , V/Jackson, WI 53037-0000

Dear Village of Jackson -BRIAN KOBER,

With your returned service application, you are on your way to having electric service installed at your location.

Please confirm that the following electric service details are correct. If not, please call me right away.

Type:	New Service	Subdivision:	n/a
Class:	Underground	Lot #:	
Size:	100 amps	Work Request #: 3766907	(for internal use only)
Voltage:			

Your next steps are to:

1. *Send in payment for electric service installation.*
   - **The cost for electric service installation is: $2,434.19**
   - Additional charges will apply if installation is needed from December 1 through March 31.
   - We must receive your payment and electrical inspection before we can schedule your installation. Please include the service address with your payment, and send it to us in the enclosed envelope.
   - In the event we encounter unusual conditions during the installation of your service, there may be additional charges.
   - This amount is valid for 90 days from the date of this letter.
   - If an additional cost estimate is needed within 12 months, there will be a charge for preparing the new estimate.
2. *Sign and return one of the enclosed sketches:*
   - Review, sign and return an enclosed sketch in the envelope provided.
   - Draw and label any private underground facilities on the sketch.
   - We must receive your approved and signed sketch before step #3 below.
3. *Send or fax the* Ready for Service *card when the site is ready for electric service installation:*
   - Your construction site is ready for service when requirements 1-4 on the *Ready for Service* card are met.
   - When we receive your card, we will call you to discuss the installation.

4. Mark private underground facilities.
   - Locate and mark (with stakes, spray paint or flags) or expose any customer-owned underground obstructions or facilities.
   - If you are not sure what this includes, please call for more information.
   - We Energies and/or its agents will not be held responsible for damage to unmarked, private facilities.

Contact me for all of your electric installation needs.

I'm here to make sure your questions are answered and any concerns you have are addressed. On behalf of We Energies, I appreciate the opportunity to serve you and look forward to providing you with safe, reliable and reasonably-priced electricity.

Sincerely,

Lori Hoft
Sales Representative
Phone 262-338-7674; Fax 262-338-7646

we energies

ELEC WR **WB 3766907**

GAS WR

CITY / TOWN / VILLAGE: V/JACKSON

CUST/PROJ NAME: VILLAGE OF JACKSON

PROJECT LOCATION: W226N16780 CEDAR PARKWAY

WORK DESCRIPTION: NEW DB 100A 1PH 120/240V SERVICE

PREPARED BY: ARIELA DURAN

E-MAIL: ARIELA.DURAN@WE-ENERGIES.COM

OFFICE #: 262-338-4752 CELL #: 414-254-0158

PAGER #: IO #: 5475

PROJECT ID: CGS #:

DATE PREPARED: 5/4/2015 DATE REVISED:

COMMON INFORMATION

STAKING REQUIREMENTS:

- [X] SURVEYOR
- [ ] STAKED
- [ ] DESIGNER
- [ ] NOT NEEDED

MAIN / SERVICE IN EASEMENT:

- [ ] YES
- [ ] NO

RESTORE PRIVATE PROPERTY: [ ] WE ENERGIES [ ] CUSTOMER

WORK IS APPROX 100 FT, DIRECTION SOUTH OF CL OF STH 60 NEAREST CROSS STREET (ALSO FOR GAS SERVICE TEE)

ELECTRIC INFORMATION

OPER MAP #: 4032-7952-04 FEEDER/LINE #: Z33882

CATV JOINT USE #: TEL JOINT USE #:

PROPOSED GAS SERVICE INFORMATION

MTR SIZE: MTR TYPE:

SERV PIPE SIZE: MATERIAL:

MTR LOC: FT. OF CORNER

CONSTRUCTION TYPE:

- [ ] EFV
- [ ] RELIGHT
- [ ] CURB VLV
- [ ] TIE IN PIPING

NORTH NOT TO SCALE

NOT FIELD VERIFIED
Z33882

JOB INFO:

SECTION / TOWN / RANGE: NE1/4 SEC24, T10N, R19E

SITE VISIT COMPLETED BY: ARIELA DURAN

JOB OWNER: LOFI HOFT 262-338-7674

MAIN CONTACTS

- [ ] CONTRACTOR/BUILDER:
- [ ] PLUMBER/ HVAC:
- [ ] ELECTRICIAN:
- [X] CUSTOMER: BRIAN KOBER 262-677-9001

CONTINGENCIES & COMMENTS:

DIGGERS HOTLINE DIG REQUIRED.

WE ENERGIES WILL NOT RESTORE .

WE ENERGIES WILL NOT HAUL SPOIL.

CUSTOMER IS REQUIRED TO LOCATE ALL PRIVATE UNDERGROUND FACILITIES PRIOR TO INSTALLATION.

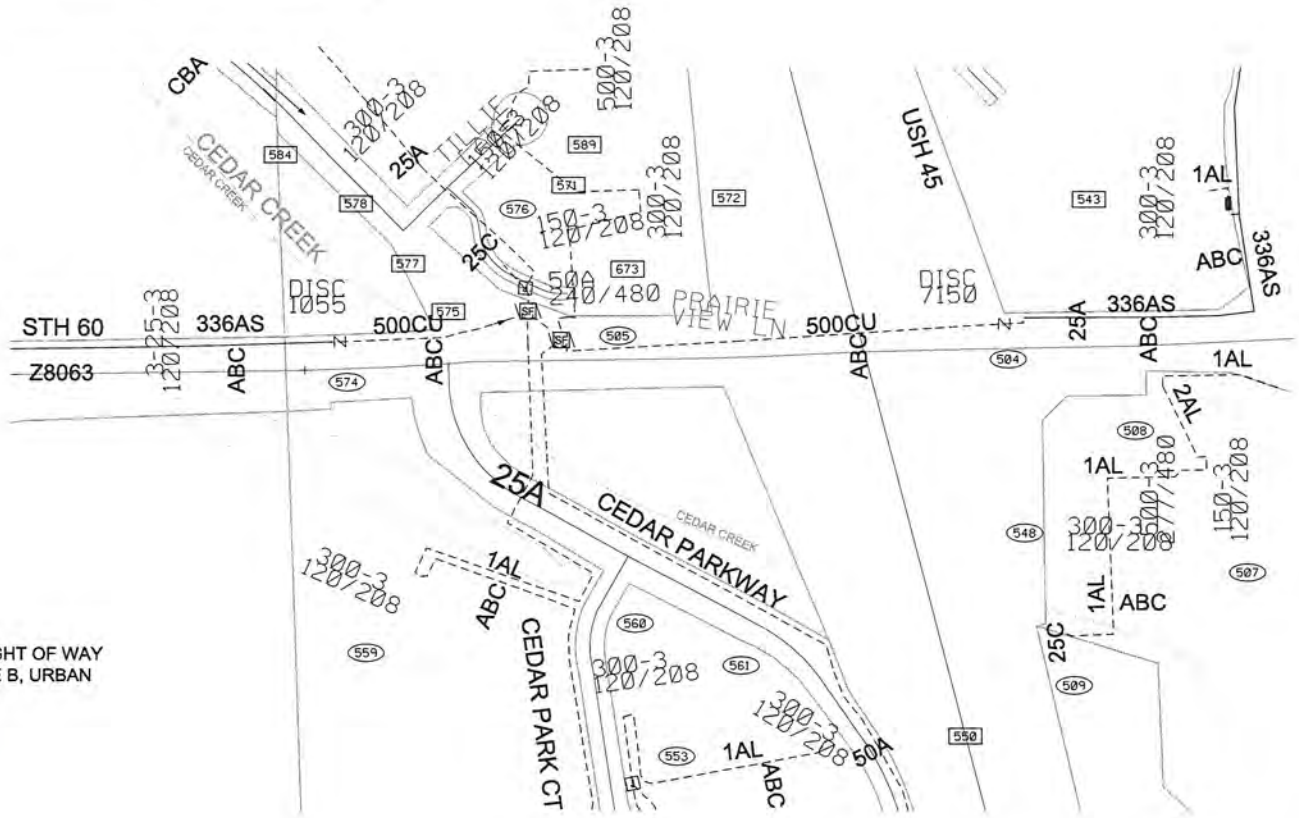
WE ENERGIES IS NOT RESPONSIBLE FOR ROOT DAMAGE

CONSTRUCTION REMARKS:

*KEEP A MINIMUM OF 5' AWAY BETWEEN PRIMARY

*RESTORE ALL DISTURBED AREAS WITHING THE ROAD RIGHT OF WAY WITH PERMANENT SEED AND EROSION MAT CLASS I, TYPE B, URBAN

CUSTOMER'S SIGNATURE OF APPROVAL *DATE*



SHEET NO. 1 OF 3

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we energies

ELEC WR **WB 3766907**

GAS WR

EROSION CONTROL LEGEND

ENV 6, 27 BORE PIT / ENV 6, 27 BORE PIT	APPROXIMATE BORE PIT LOCATION (WITH & WITHOUT PERIMETER CONTROL)
A/B/C/D	INLET PROTECTION, TYPE
	12" WATTLE or 12"/20" SEDIMENT LOG or 9.5"/20" EROSION EEL
	STONE DITCH CHECK
	SAND or ROCK BAG
	MULCH
	SOIL STABILIZER, TYPE B
	EROSION MAT CLASS I, TYPE A
	EROSION MAT CLASS I, TYPE B
	EROSION MAT CLASS I, TYPE A URBAN
	EROSION MAT CLASS I, TYPE B URBAN
	EROSION MAT CLASS II
	EROSION MAT CLASS III
	VEGETATIVE BUFFER
	TRACKING PAD
	TIMBER MAT
	SILT FENCE
TSB	TEMPORARY SEDIMENT BASIN
	SURFACE WATER FLOW

TOTAL SECONDARY 305'

MANUFACTURER: _____

KVA: _____

VOLTAGE: _____

LOCATION ID: _____

PHASE: _____

FLUID TYPE: _____

DESIGN IZ: _____

SERIAL: _____

MATERIAL #: _____

OVERHEAD PRIMARY E,X,W, or Z

Z 1-#2 ACSR
Z1 1-#1/0 ACSR
Z2 1-#3/0 ACSR
Z3 3-#2 ACSR
Z4 3-#1/0 ACSR
Z5 3-#3/0 ACSR
Z7 3-#336 ACSR
Z9 SPECIAL LIST ON SKETCH
Z10 1 WIRE REMOVAL
Z11 2 WIRE REMOVAL
Z12 3WIRE REMOVAL

DIRECT BURY PRIMARY E,X,W, or Z

Z13 1-#1 AL 25KV
Z14 3-#1 AL 25KV
Z15 3-#500 AL 28KV
X16 1-#2 AL 15KV
X17 3-#2 AL 15KV
X18 3-#500 AL 15KV
Z21 3-#750 AL 28KV

NEUTRAL

N 1-#2 ACSR
N1 1-#1/0 ACSR
N2 1-#3/0 ACSR
N3 1-#4/0 AL
N4 1-#336 ACSR
N5 REMOVAL

SECONDARY - 1PHASE

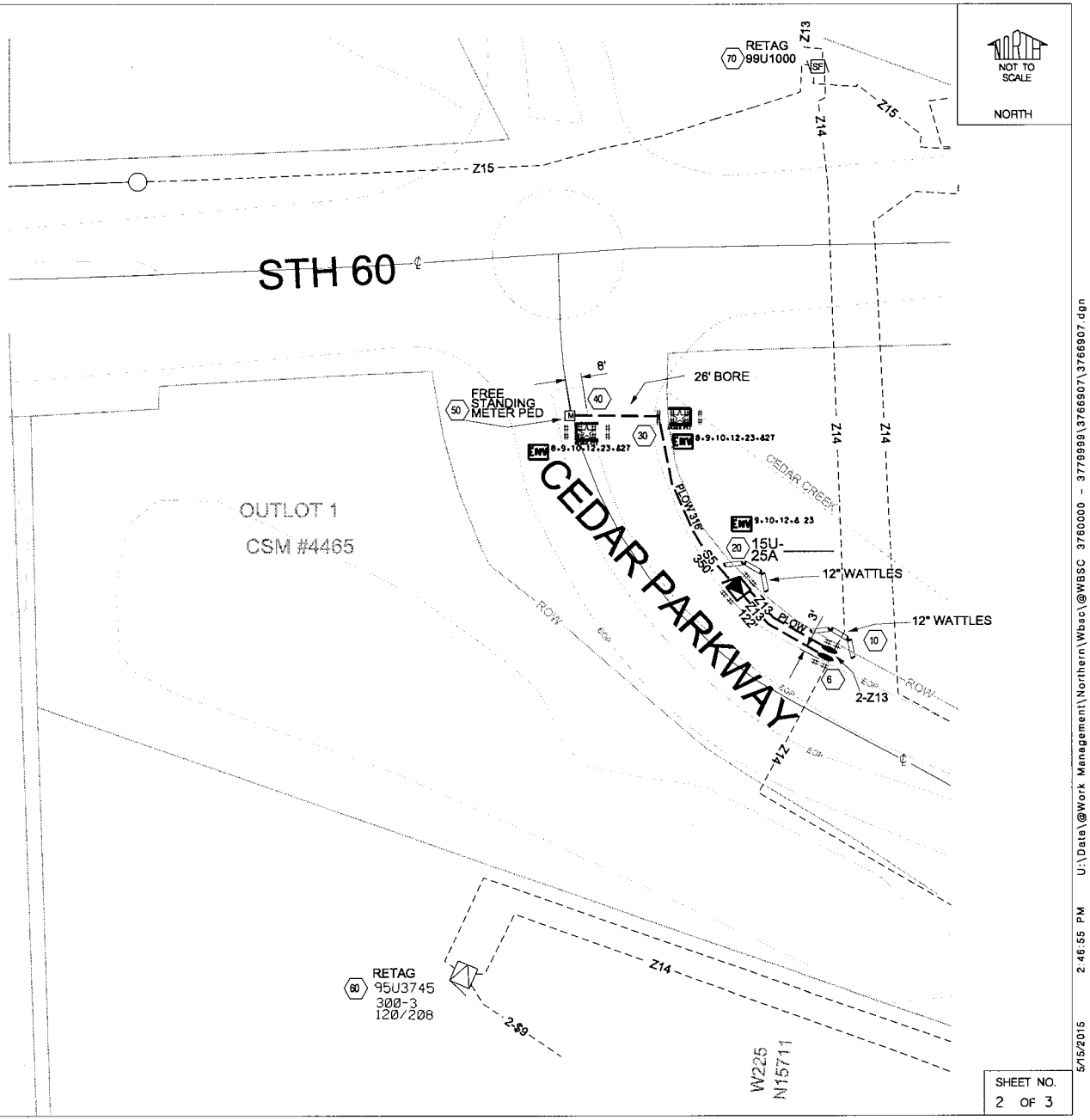
S 6DX
S1 4 TX
S2 2 TX
S3 1/0 TXR
S4 3/0 TXR
S5 350 TXR
S6 750 TXR
S7 1/0 TXF
S8 4/0 TXF
S9 336 TXR
S10 3 WIRE MAIN
S11 REMOVAL

GUYING

G 1/4" ARM GUY
G1 5/16" ARM GUY
G2 3/8" ARM GUY
G3 5/16" POLE GUY
G4 3/8" POLE GUY
G5 7/16" POLE GUY

SECONDARY - 3PHASE

$ 1/0 TXF
$1 4/0 TXF
$2 336 TXF
$3 3/0 TX
$4 350 TX
$5 750 TX
$6 1/0 QXF
$7 3/0 QXF
$8 350 QXR
$9 750 QXR
$10 3 WIRE REMOVAL
$11 3/0 QXR
$12 4 WIRE REMOVAL



SHEET NO. 2 OF 3

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we energies

ELEC WR WB 3766907

GAS WR

NOT TO SCALE

NORTH

WE ENERGIES WORK REQUEST ENVIRONMENTAL NOTES

Notes #1 - #7 apply to ALL work requests:

General

1. If WDNR and/or USACE permits were obtained for the project, all permit conditions shall be met during construction of the project.

Erosion Control

2. If soil disturbance occurs on slopes or channels/ditches leading to wetlands or waterways, or within wetlands, the disturbed areas shall be stabilized and appropriate erosion control Best Management Practices (BMPs) shall be implemented.
3. Erosion control BMPs shall meet or exceed the approved WDNR Storm Water Management Technical Standards (http://dnr.wi.gov/topic/stormwater/standards/const_standards.html). Refer to We Energies' Construction Site Sediment and Erosion Control Standards.
4. Inspect installed erosion control BMPs at least one time per week and after ½-inch rain events; repair as necessary.
5. When temporary stabilization is required (e.g. for winter or short-term construction) prior to final restoration, soil stabilizer shall be installed wherever possible. Erosion mat shall be used temoranly only where appropriate, in accordance with state standards, and when approved by the Operations Supervisor.

Contaminated Soils

6. Whenever soil exhibiting obvious signs of contamination (e.g., discoloration, petroleum or solvent odor, free liquids other than water, buried containers or tanks, or other obvious signs of environmental impacts) is encountered during excavation or installation, cease work immediately, take appropriate immediate precautions to ensure worker health and safety, and contact the Operations Supervisor or Inspector.

Spills

7. If an oil spill occurs on during construction, call the Environmental Incident Response Team (EIRT) at (414) 430-3478:
   a. Any quantity of oil is spilled into surface water;
   b. Any oil spill greater than 50 ppm PCB into a sewer, vegetable garden, or grazing land;
   c. Any oil spill containing greater than 500 ppm PCB;
   d. Five gallons or more of oil spilled to the ground;
   e. Any oil spill involving a police department, fire department, DNR, or concerned property owner.

Notes #8 - #27 apply as noted at specific points within each work request:

Dewatering

8. Dewatering of pits or trenches shall be done in accordance with state standards. Use an approved sediment bag, a straw bale dewatering basin, a combination of both, or equivalent.

Wetlands

9. As much as practicable, the majority of the work shall be staged from the public roadways and road shoulders, keeping equipment out of adjacent wetlands.
10. All work shall be conducted to minimize soil disturbance. No rutting will be allowed within the wetlands.
11. If soils are not frozen or stable to a point that avoids rutting, timber mats, mud tracks, or equivalent shall be utilized to access pole locations.
12. Excavated soils cannot be stockpiled in wetlands.
13. All excess spoils shall be removed from wetlands and placed in a suitable upland location.
14. Trenching and pit excavations within wetlands shall include soil segregation to facilitate restoration of pre-construction soil stratification, and restoration to pre-construction elevations.
15. Poles scheduled to be removed, and that occur within wetland, shall be cut at the ground surface.

Waterways

16. No work can be performed within the banks or below the ordinary high watermark of any navigable waterways/streams.
17. No crossing of navigable waterways with equipment can occur. Foot traffic is allowed.
18. Any disturbed soil within 75-feet of the ordinary high water mark of any navigable waterways/streams shall be stabilized within 24 hours of construction completion.

Threatened and Endangered Species

19. Threatened or endangered species are known to occur in the work area. It is illegal to harass, harm, or kill a protected species under state and federal regulations. Proper precautions shall be taken to ensure harm to individuals is avoided.
20. In order to protect the threatened or endangered species, work must be conducted between November 5 and March 15.
21. Exclusion fencing must be installed at the work area prior to March 15.
22. A qualified biologist must be present when conducting work at this location.

Invasive Species

23. State regulated invasive species are known to occur in the work area. Reasonable precautions are legally required to prevent the spread of these species. The Wisconsin Council on Forestry Transportation and Utility Rights-of Way Best Management Practices should be followed: (http://council.wisconsinforestry.org/invasives/transportation/).

Cultural and Historical Resources, cont.

24. The project is within or adjacent to an area that is identified by the State of Wisconsin as potentially having Native American artifacts, burial mounds or burial sites, which could be encountered during construction.
25. If human bone or any artifacts are discovered during construction, work must cease immediately. Contact the Environmental Department who will contact the State Burial Sites Preservation Office and determine the next steps that must be taken in order to comply with state law. Work at that site MAY NOT PROCEED until the Environmental Department authorizes it.
26. A "qualified archaeologist," as specified under Wis. Stats 157.70 (1) (i) and Wis. Admin. Code HS 2.04 (6), must be present to monitor all ground disturbing activities.

Frac-out Contingency Plan

27. A frac-out contingency plan shall be on-site and implemented accordingly. The contingency plan shall incorporate the following components.
    a. Continuously inspect the bore paths for frac-outs in order to respond quickly and appropriately.
    b. Containment materials (e.g. silt fence, straw bales, sand bags, etc.) shall be on site and available should a frac-out occur.
    c. A vac truck shall be accessible on short notice in order to respond quickly to a frac-out.

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We Energies Sketch Key

This sketch key will help you understand the proposed design for your property as described in the accompanying letter.

Symbols for Equipment On Poles

	New	Existing	To Be Removed
Poles			
Wires on Poles			
Anchor Guys			
Transformer On A Pole			

Symbols for Forestry and Brush Work

	Existing	Center Trim	Top Trim	Side Trim	Remove
Trees Clearance of at least 2 feet – and often as much as 10 feet or more – is required around wires.		C	T	S	
Brush Complete removal of brush may be required to create a 10-foot-wide path for trucks, poles, pad-mounted equipment and underground trenches.					BR

2K9307-PW-IN

We Energies Sketch Key

This sketch key will help you understand the proposed design for your property as described in the accompanying letter.

Symbols for Equipment On or Buried Under the Ground

	New	Existing	To Be Removed
Underground Wires			
Wire Pedestal Approximately 1 foot x 1 foot x 3 feet	P	P	
Transformer Box Approximately 5 feet x 5 feet x 5 feet	*Door		
Switch Box Approximately 7 feet x 7 feet x 6 feet tall	*Door SF or VFI *Door	SF or VFI	SF or VFI
Concrete Ducts and Wires In Road Sizes and shapes vary: Approximately 8 feet x 20 feet x 10 feet deep	1 1		1 1
Manhole Sizes and shapes vary: Approximately 8 feet x 20 feet x 10 feet deep			
Transformer Room / Vault Sizes vary			

* IMPORTANT NOTE: The area in front of the door must be clear of trees, bushes, fences, sheds, etc. for a minimum distance of 10 feet. This space is needed to operate the equipment safely. In addition, the area around the sides and back must have a clearance of 3 feet.

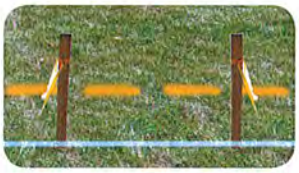
Form 4167 1-11 Lot# 705-8376

Are you ready for electric service?

Important! **The electric ready for service card must be completed when you are ready for electric service and returned to us before we can begin your new service installation.**

I understand that the following items need to be completed before installation begins.

☐ Located, marked or exposed any private buried obstructions or underground facilities – such as a well, drain tiles, septic/mound system and/or underground yard lighting – with stakes, spray paint or flags (applies to underground service only).*



Note to customer: *We Energies and/or its agents will not be held responsible for damage that occurs to customer-owned underground facilities that are not properly located and marked before electric service installation.*

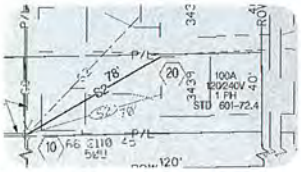
☐ Cleared a minimum 10-foot-wide path along the service route from the property line to the meter location. I've made sure things like dirt piles and construction materials aren't in the way (applies to underground service only).

☐ Submitted payment, if applicable.

☐ Prepared the ground around my building and along the service route to within 4 inches of final grade (applies to underground service only).

☐ Installed meter socket at agreed-upon meter location (applies to both underground and overhead service).

☐ Sent my signed sketch (if applicable) and informed We Energies of any planned decks, patios or pools before my service is installed. Once my service is installed, it would be my responsibility to pay any costs to move my electric facilities to accommodate future structures. **Note:** Building over the top of electric facilities may cause serious safety or code violations.



* *If you are unable to properly locate and mark your privately owned buried facilities, you can hire a contractor to do it for you.*

I understand that my service will not be energized until We Energies receives my municipal inspection or affidavit.

Electric ready for service card

Please complete, sign and return this card when all of the items above have been completed.

Name: _____

Installation address: W226 N16780 Cedar Pkwy *(please print)*

City: V/Jackson *(please print)* State: _____ ZIP code: _____

Daytime phone: _____

☐ I certify that I am the owner or authorized representative of the owner.

Signature: _____ Date: _____

☐ Please hold my ready for service card and schedule installation after March 31.

(For We Energies office use only) Order number: 3766907

Additional charges for electric service installation apply from Dec. 1 through March 31.

For new service questions, visit www.we-energies.com/newservice or call 262-574-6400 or 866-423-0364 (toll free).

150 12-12

Village of Jackson
Water Department

Memo

To: Brian Kober

From: Dan Rathke DR

CC: Jeff Deitsch

Date: 6/19/2015

Re: 200,000 gallon Tower exterior painting

I had received three bids to repaint the blue 200,000 gallon water tower.

Badger Specialty Coatings & Construction	$100,750.00
Osseo Construction Co.	$ 97,400.00
Superior Tank Company	$ 44,900.00

Superior Tank is the contractor we used last year to paint the white tank. This price will be to paint the tower the same painting scheme as the white tower with the exception of all white areas of the tower be painted a light blue with white "Jackson" lettering. If you choose to paint the tower a solid light blue color as it is now the price will be $43,400.00

I was happy with the quality of work performed by Superior tanks crew and recommend we hire then to paint the water tower.

Dan Rathke

Water Utility Supervisor

SUPERIOR TANK COMPANY, INC.

PO Box 1130
Madisonville, KY 42431
Phone (270) 821-1000 Fax (270) 821-7931

PROPOSAL

Proposal #:	P2015-0198HC	Date:	June 19, 2015
Submitted To:	Village of Jackson	Attention:	Mr. Dan Rathke
	PO Box 147	Phone:	262/677-9001 Ext: 23
	Jackson, WI 53037	Email:	watersuper@villageofjackson.com

We propose to furnish all labor, material, equipment and insurance necessary using our standard procedure to complete the following:

REF: ONE (1) 200,000 GALLON WATER SPHERE - WELDED - 156' TALL - POTABLE WATER

Scope: Exterior

a. Removal of loose coating and any mildew by WATERBLAST cleaning all areas of exterior surface, removal of rust and scale by HAND TOOL cleaning all deteriorated areas of the exterior surface.

b. Complete exterior inspection of the metal, of all the exterior walls, roof, floor (to the extent possible) and/or bowl shall be performed. The seams and welds shall be visually examined. The exterior support members and accessories shall be examined to verify structural integrity and Regulatory Code Conformance.

c. In the event of deficiencies, an oral representation of the structures existing condition, followed by a written proposal shall be presented to the owners' representative for final determination. No repairs shall be performed without the express consent of owner or owners' representative.

d. Upon completion of repairs, if any, the exterior shall be re-cleaned as required by the repair processes.

COLOR SCHEME AS FOLLOWS: Paint the entire tank the existing color EXCEPT, paint a NAVY BLUE band beginning at the top painter's ring to just below the middle of the tank shell. This BAND should be painted exactly and in the same location as on the 500,000 gallon tank that STC painted in 2014.

e. Application of one spot prime coat; TNEMEC PRIMER

f. Application of one full finsih coat of TNEMEC ENDURA-SHIELD II, SERIES 1074UV.

g. Re-application of logo 'as is': JACKSON in WHITE script letters on TWO sides of the tank.

h. APPLY A CLEAR COAT to the new navy blue band for help with color retention OR STC site supervisor may opt for applying an extra coat of 1074 UV instead of the clear coat. There will be no increase in price.

All The Above for the Total Sum Of..... $44,900.00

OPTION: A $1,500.00 DISCOUNT WILL BE GIVEN IF THE TANK IS PAINTED A SOLID LIGHT BLUE COLOR AND NOT TWO-TONED. THE RE-APPLICATION OF THE "JACKSON" LOGO WILL STILL BE APPLIED 'AS-IS' IN WHITE SCRIPT LETTERS ON TWO SIDES OF THE TANK. THIS OPTION ELIMINATES THE NEED FOR THE CLEAR COAT TO BE APPLIED ON THE BAND BECAUSE THERE WILL NOT BE A BAND WITH THE TANK ONLY ONE COLOR. THIS OPTION WOULD MAKE THE PRICE..... $43,400.00

General:

Materials shall be delivered to job site in original containers.
Owner to provide containers and dispose of any waste generated during this project.
MSDS documents shall be made available to the owner.
Customer to provide adequate power and water to jobsite.
Tank must be drained in order for warranty to be valid.
Down time (if caused by the owner, their subcontractors, or representatives) will be charged at a rate of $70 per hour per man. Daily rates will be charged at a rate of $560 per day per man.
Contractor assumes no responsibility for non-availability of materials and/or weather delays.
Tank owner to prohibit parking, protect valuables and restrict parking in areas adjacent to tank while work is being performed. STC, its employees, officers, directors, owners, subcontractors and/or their assigns are not responsible for paint claims. Customer understands that the paint can carry long distances in wind.
Tank owner will kill or properly shield all electrical lines within 30 feet of tank or supporting structure.
Providing forced air ventilation and proper cure times for paint projects are the responsibility of the owner.
Confined space monitoring will be done by oxygen sensors. If owner requires additional monitoring, the test equipment will be provided by the owner.
Materials shall be applied in weather conditions acceptable to coating manufacturers' recommendations.
Cure time for paint can be from 3-28 days depending on humidity and temperature.
All confined space stickers to be replaced with new if exterior is painted.
Certification of Workman's Compensation, and General Liability shall be available to owner.
Workmanship is warranted for a period of one year unless otherwise stated.
Disinfection and bacteriological testing (if required) is the responsibility of the owner.
An additional coat of exterior paint may be required for proper coverage. If so, additional charges will apply. The exterior paint will not be warrantied if it is determined that a second coat is needed and not accepted.
Down payments are non-refundable if customer cancels any portion of the contract.
If roof seams are not caulked, this area will not be warrantied.
This contract was drafted in the Commonwealth of Kentucky. Any litigation, if necessary will be according to the laws of the Commonwealth and will be tried in Hopkins County, Kentucky.
STC reserves the right to work weekends and up to 16 hour days. If customer requires different schedule, additional charges will apply.

NOTICE

All personnel will exhibit strict adherence in implementation of duties in accordance to 29 CFR 1910.145 Confined Space Entry and applicable Safety Procedures.

TERMS: 40% DOWN PAYMENT UPON ACCEPTANCE OF PROPOSAL; 60% DUE AND PAYABLE IMMEDIATELY UPON COMPLETION OF EXTERIOR COATING

Labor based on Open Shop Wages. No bonding or prevailing wages are included in quotation.

If required, the handling, removal and/or disposal of hazardous or contaminated material, such as asbestos, lead, chemicals or any like substance that requires special handling or that must be taken to a specific dump/disposal site is not included in the quotation for work submitted herein.

Accepted:

By: _____
Title: _____
Date: _____

Respectfully Submitted:

SUPERIOR TANK COMPANY, INC.
By: Heather Clark
Title: Corp Sales Dir.
Proposal Valid for 30 Days

To accept, sign and return to our office

Osseo Construction Co. LLC

14248 10th St
P O Box 143
Osseo, WI 54758

Estimate

Date	Estimate #
5/21/2015	230

Name / Address
Village of Jackson Dan Rathke N168 W20733 Main St. Jackson, WI 53037

Project

Description	Qty	Rate	Total
Estimate to paint 200MG Spheroid Water tank per specifications provided.		97,400.00	97,400.00

Call with any questions 715-456-5762

Total $97,400.00

BADGER SPECIALTY COATINGS & CONSTRUCTION LLC

Proposal

Dan Rathke
Water Utility, Supervisor
N168 W20733 Main St
Jackson, WI 53037
262-677-9001
414-840-9832 (cell)

PROJECT:
Elevated 200,000 gal spheroid

This quote to include the power washing of a 200,000 gal elevated storage tank BSCC will provide all equipment, material, labor and supervision to do this job in a safe and timely manner. We will prep and paint entire tank as per spec with Tnemec coatings. It is our understanding tank to contain a multicolor paint scheme consisting of light blue stand pipe, Dark blue dry area under bowl and light blue main body, with city name. We will not remove any cellcom or emergency response equipment however, we will take all necessary precautions to protect

Total
$ 100,750.00

5113 east US Hwy 14
Janesville, WI 53546

PHONE 608 290 3500
FAX 608 754 0668
EMAIL bscc@yahoo.com
WEB SITE

WisDOT 2016-2020 CMAQ Program Application

NOTE: This application is required for each proposed 2016-2020 program cycle CMAQ project. Please review and utilize CMAQ Program Application instructions when completing this application.

Project Applicant and Application Type

Name, Location of Public Sponsor and Sponsor Type:

Sponsor Name: **Village of Jackson**

Sponsor Type: ☐ State ☐ County ☐ City ☒ Village ☐ Town ☐ Tribal Nation

(Check appropriate box)

Project Title: **STH 60 and CTH P Intersection Improvements**

Describe location, boundaries and length of the project: **The four quadrants of STH 60 and CTH P intersection**

County: **Washington**

Street Address of Project (if located on a highway or road): **STH 60 and CTH P intersection**

Note: Attach one black and white project location map on one sheet of paper, size 8½ X 11

Name of the MPO representing the project (check one):

☒ Southeastern Wisconsin Regional Planning Commission (SEWRPC)

☐ Bay-Lake Regional Planning Commission (BLRPC) – for Sheboygan Metropolitan Planning Area only

☐ Non-Metropolitan Planning Area

Project Representative Contact Person(s) Information:

Primary Public Sponsor Agency Contact Information:

Name: **Brian Kober** Title: **Director of Public Works** Street Address: **N168 W20733 Main St.** Phone: **(262)677-9001**

Municipality: **Village of Jackson** State: **WI** Zip: **53037**

Fax: **(262) 677 - 9710** E-mail: **dirpubwks@villageofjackson.com**

Secondary Public Sponsor Agency or Private Organization Contact Information:

Organization / Agency Name:

Name: Title: Street Address: Phone: **( ) -**

Municipality: State: **WI** Zip:

Fax: **( ) -** E-mail:

Project Activity

CMAQ Category:

Indicate which ONE of THREE categories best identifies the proposed project:

- ☒ Project reduces the number of vehicle trips and/or vehicle miles traveled (VMT).
- ☐ Project reduces the per mile rate of vehicle emissions related to traffic congestion.
- ☐ Project reduces the per mile rate of vehicle emissions through improved vehicle and fuel technologies.

CMAQ Improvement Type:

Indicate the appropriate improvement type(s) by checking all of the boxes which apply to the proposed project:

- ☐ Public Transportation
- ☒ Bicycle/Pedestrian
- ☐ Car and Vanpooling
- ☐ Park & Ride Lot
- ☐ Traffic Flow Improvement (e.g. System Signalization)
- ☐ Diesel Retrofit
- ☐ PM2.5 Emissions Reduction
- ☐ Other If Other, Please Describe:

Project Summary (100 words or less). Please copy and paste your response from a Word Document.

The shared use paths and intersection improvements will provide a vital connectivity that currently does not exist at the intersection of STH 60 and CTH P. These paths and intersection improvements will provide safe access through the STH 60 and CTH P intersection. The project will eliminate this gap in facilities through signal equipment and timing upgrades, island geometry adjustments, signing and marking, sidewalks and/or shared use path construction. The improvements will decrease utilitarian trips and improve congestion and air quality in the area.

Existing Facilities & Projects

Rail Facilities:

Does a railroad facility exist within 1,000 feet of the project limits? ☐ Yes ☒ No

If yes, specify: **SELECT**

If yes, does the project physically cross a rail facility? ☐ Yes ☐ No

Is the proposed project location in an area with known safety issues? ☐ Yes ☒ No

If yes, specify: (consider applying for Highway Safety Improvement Program (HSIP) funds if applicable)

Is this project on or parallel to a local road or street? ☐ Yes ☒ No

If Yes, provide the name of the road or street:

Does this project cross a state or federal highway? ☒ Yes ☐ No

Does this project run parallel to a state or federal highway? ☒ Yes ☐ No

Will this project be constructed as part of another planned road project? ☐ Yes ☒ No

If Yes, specify if this is a state, county, or local project and when the road project is scheduled for construction:

See project narrative.

Will any exceptions to standards be requested?	☐ Yes	☒ No
If Yes, provide a brief description of the exceptions that may be requested:		

Environmental/Cultural Issues

Agriculture Comments:	☐ Yes	☒ No	☐ Not Investigated
Archaeological sites Comments:	☐ Yes	☒ No	☐ Not Investigated
Historical sites Comments:	☐ Yes	☒ No	☐ Not Investigated
Designated Main Street area Comments:	☐ Yes	☒ No	☐ Not Investigated
Lakes, waterways, floodplains Comments:	☐ Yes	☒ No	☐ Not Investigated
Wetland Comments:	☐ Yes	☒ No	☐ Not Investigated
Stormwater management Comments:	☐ Yes	☒ No	☐ Not Investigated
Hazardous materials sites Comments:	☐ Yes	☒ No	☐ Not Investigated
Hazardous materials on existing structure Comments:	☐ Yes	☒ No	☐ Not Investigated
Upland habitat Comments:	☐ Yes	☒ No	☐ Not Investigated
Endangered/threatened/migratory species Comments:	☐ Yes	☒ No	☐ Not Investigated
Section 4(f) Comments:	☐ Yes	☒ No	☐ Not Investigated
Section 6(f) Comments:	☐ Yes	☒ No	☐ Not Investigated
Through/adjacent to tribal land Comments:	☐ Yes	☒ No	☐ Not Investigated

Miscellaneous Issues

Construction Schedule Restrictions (trout, migratory bird, local events): **None**

Real Estate: Was any real estate acquired or transferred in anticipation of this project? ☐ Yes ☒ No

If yes, please explain.

Right of Way (ROW) *(NOTE: It is recommended that local funds be used to acquire right of way)* Is the project on an existing right of way? ☒ Yes ☐ No If Yes, have you obtained a permit from the WisDOT Regional Office Maintenance Section to conduct work on the right of way? ☐ Yes ☒ No

Check all boxes that apply to ROW acquisition for this project:

☒ None ☐ Less than ½ acre ☐ More than ½ acre

☐ Parklands ☐ Large parcels ☐ Temporary interests

Maintenance *(only complete this section if project application involves a trail project):*

Will the facility be snowplowed in the winter? ☒ Yes ☐ No

Comment:

If no to the above question, will the trail allow snowmobile use in the winter? ☐ Yes ☐ No

Comment:

Anticipated fee for trail use: ☐ Yes ☒ No

Comment:

Anticipated equestrian use on trail: ☐ Yes ☒ No

Comment:

Other Funding Sources: Has the municipality anticipated, requested or been approved for other federal or state funding from WisDOT for the improvement? ☐ Yes ☒ No

If yes, please indicate all of the other funding sources that are anticipated, have been requested or approved with the associated project ID(s):

Highway Safety Improvement Program (HSIP)	☐ Anticipated	☐ Requested	☐ Approved	ID:
Local Roads Improvement Program (LRIP)	☐ Anticipated	☐ Requested	☐ Approved	ID:
Railroad Programs	☐ Anticipated	☐ Requested	☐ Approved	ID:
Surface Transportation Program - Rural	☐ Anticipated	☐ Requested	☐ Approved	ID:
Surface Transportation Program - Urban	☐ Anticipated	☐ Requested	☐ Approved	ID:
Transportation Alternatives Program	☐ Anticipated			
Transportation Enhancements Program			☐ Approved	ID:
Bicycle & Pedestrian Facilities Program			☐ Approved	ID:
Safe Routes to School			☐ Approved	ID:
Transportation Economic Assistance Program	☐ Anticipated	☐ Requested	☐ Approved	ID:
Flood Damage Aids	☐ Anticipated	☐ Requested	☐ Approved	ID:
Other:	☐ Anticipated	☐ Requested	☐ Approved	ID:

Other Concept Notes: Provide any additional relevant project information that has not been covered in another section of the application.

See project narrative.

CONFIDENTIAL INFORMATION

Project Costs and Dates

NOTE: do not include pages A-5 and A-6 in the Concept Definition Report (CDR)

Project Costs Complete the table below for the appropriate fiscal years of the application/project cycle (2016-2020). If a sponsor proposes to construct a project in phases throughout multiple years, schedule the project costs as appropriate and provide further details in the project description. You must attach a detailed breakdown of project costs in Microsoft Excel as part of responding to the Narrative Response/Attachment 1. This detailed breakdown must clarify assumptions made in creating the budget such that a third party reviewer would be able to substantiate the assumptions. This will not count against the 3-page narrative report text limit.

Project Dates In addition to providing fiscal year in the table below, within the attached breakdown of project costs please provide estimated month and year the project will begin for each project phase. Design work is typically completed in six months, real estate transactions and railroad crossing approvals take at least a year to complete, and projects should be built within one construction season unless the project is very large.

Submit a separate application and budget for each project or stand-alone project segment for which you are willing to accept funding, or for a bike trail section that could function as a separate facility. Project requests are not considered for partial funding.

Applicants should reference the WisDOT 2015 Cost Estimate Table **prior to completing this section of the application:** http://www.dot.wisconsin.gov/localgov/highways/tools.htm

NOTE: Requesting design and construction projects in the same fiscal year is not allowed.

☐ **Tied Projects? Please indicate which projects will be tied (if applicable):**

☒ **Construction:**

Basis for Construction Estimate: ☒ Itemized ☐ Per Square Foot ☒ Past Projects
☐ WisDOT 2014 Cost Estimate Table (see hyperlink above) ☐ Other, please specify:

Project Prioritization

If a sponsor is submitting more than one project in an urbanized area within an MPO, the sponsor must rank each project in priority order, e.g., 1 (highest priority) to 5 (lowest), for the local priority among five projects. MPO staff will use the local ranking as a guide during application review prioritization that occurs prior to the meeting of the WisDOT CMAQ selection committee. Local sponsor prioritization for projects outside of MPO areas is also strongly recommended. **Project Priority: 1**

☐ FY 2017 ☐ FY 2018 ☒ FY 2019 ☐ FY 2020

Construction (minimum $200,000):

Federal Share of the Participating Construction Cost (80%)	$**180,000**
Local Share of the Participating Construction Cost (20%)	$**45,000**
Non-Participating Construction Cost (100% Local)	$**55,000**
A. Subtotal Construction Costs	$**280,000**

B. State Review for Construction Percentage: **17 %** $**47,600**
(see instructions, page I-7, Table 1)

Construction with State Review Cost Estimate (sum lines A and B) **$327,600**

☒ **Design:**

☐ 100% Locally Funded (state review is required to be included as 100% locally funded) **OR**
☒ 80% Federally Funded ("state review only" projects are not allowed)
Project Priority:

☒ FY 2017 ☐ FY 2018 ☐ FY 2019 ☐ FY 2020

A. Plan Development (see instructions page I-9, Table 1)	Percentage: **14 %**	$**39,200**
B. State Review for Design (see instructions, page I-9, Table 1)	Percentage: **7 %**	$**19,600**
Design with State Review Cost Estimate (sum lines A and B)		**$58,800**

☐ **Real Estate:** (Recommend funding with local funds.)
Project Priority: N/A

☐ FY 2017 ☐ FY 2018 ☐ FY 2019 ☐ FY 2020

Total Real Estate Cost (round to next $1,000) **$0**

☐ **Other:** (Planning, Administration, or other non-infrastructure projects):

Project Priority: N/A

☐ FY 2017 ☐ FY 2018 ☐ FY 2019 ☐ FY 2020

Total Other Cost (round to next $1,000) **$0**

☐ **Utility:** (Compensable utility costs must be $50,000 minimum per utility. Recommend funding with local funds.)

Project Priority: N/A

☐ FY 2017 ☐ FY 2018 ☐ FY 2019 ☐ FY 2020

Total Utility Cost (round to next $1,000) **$0**

NOTE: WisDOT Utility Policy link: http://roadwaystandards.dot.wi.gov/standards/util/chapter17.pdf

WisDOT Information – Shaded area to be completed by WisDOT staff only.

Additional Confidential Information		
FOR WISDOT USE ONLY – enter the following information at application review		
WisDOT Region Comments on Application:		
FOR WISDOT USE ONLY – enter the following information after project approval		
Approved Federal Funding Amount: Construction: **$**	Design: **$**	Real Estate: **$**
Other: **$**	Utility: **$**	

Narrative Response/Attachment 1

Provide a narrative response attachment answering questions 1 through 6, making sure to provide information in response to each sub-question. Please limit the response to **three double-spaced** pages, using a **minimum 11-point font size**. Answers will be used to calculate emissions estimates.

1. **For Projects Affecting the Road Network:**
   - How many miles of arterial, highway or local road (segment) will the project affect?
   - How many daily vehicle miles are currently traveled (VMT) on this segment?
   - What are the changes in speed (FET studies) for morning, evening/night and peak travel periods?
   - What portion of daily VMT can be attributed to the change in speed for the designated time periods?
   - What are traffic counts for the affected segment?

2. **For Transit, Rideshare, Bicycle and Pedestrian Projects:**
   - How many new or replacement trips are expected and from which modes i.e. biking or walking?
   - How much of the new or replacement use is for work or other utilitarian trips?
   - How many auto trips will be eliminated?

- What is the average trip distance of auto trips that will be eliminated?

3. For Applied Research or Demonstration Projects:
- For what applied research or demonstration area will the results have application?
- How will project/program activities directly reduce emissions?

4. For Alternative/Clean Fuel, Engine Idling Reduction and Diesel Retrofit Development Projects:
- How many vehicles or engines will be affected?
- What is the total number of miles driven per year for each vehicle type?
- What is the quantity of fuel pumped or used per day?
- What is the certification standard (and/or fuel type) expected for each vehicle or engine type?
- What time of day will idling reduction operations occur?
- Will the project replace existing vehicles or enlarge a fleet?

5. For Area-wide Voluntary Trip Reduction and TMA Activities:
- How many employers and employees will participate or be affected?
- What is the organization's average passenger occupancy (APO)?
- What are the estimated length and frequency of affected trips?
- What are the estimated trip times for peak vs. non-peak trip hours?

6. For all projects, to the extent not already addressed in answers to the questions above, describe project benefits by answering the following questions:
- Why is the proposed project necessary to address non-attainment levels of fine particulate matter and/or ozone in the county or counties in which the proposed project will occur?
- How will the project sponsor ensure that the project is timely implemented in accordance with the Project Costs and Dates section of this application?
- What obstacles or problems must be overcome to implement this project?
- What will make this project a success, especially as compared to other proposed projects of the same or similar type? How will the project sponsor measure project success in the form of congestion and/or emissions reductions?
- How, if at all, does the proposed project add connectivity to the state's multi-modal transportation network, including bicycle, pedestrian and transit facilities?
- Briefly describe the manner in which the proposed project would provide a cost-effective benefit to the public.

7. Reference project Costs and Dates on this application form and provide detail if applicable or appropriate.

Key Program Requirements Confirmation

Please confirm your understanding of the following project conditions by **typing your name, title and initials** at the bottom of this section. **A Head of Government/Designee with fiscal authority for the project sponsor must initial this section and sign this application. Sponsor consultant(s) should not initial or sign project applications.**

a. Private organizations proposing projects generally must have a public sponsor such as a local government unit or transit operator.

b. The project sponsor or private partner must provide matching dollar funding of at least 20% of project costs.

c. This is a reimbursement program. The project sponsor must finance the project until federal reimbursement funds are available.

d. The project sponsor will pay to the state all costs incurred by the state in connection with the improvement that exceed federal financing commitments or other costs that are ineligible for federal reimbursement. In order to guarantee the project sponsor's foregoing agreements to pay the state, the project sponsor, through its duly executed officers or officials, agrees and authorized the state to set off and withhold the required

reimbursement amount as determined by the state from any monies otherwise due and payable by the state to the municipality.

e. The project sponsor must not incur costs for any phase of the project until that phase has been authorized for federal charges and the WisDOT Region has notified the sponsor that it can begin incurring costs. Otherwise, the sponsor risks incurring costs that will not be eligible for federal funding.

f. The project sponsor will follow the applicable federal and state regulations required for each phase of the project. Some of these are described in the Guidelines. The requirements include, but are not limited to, the following: a Qualifications Based Selection (QBS) process for design and engineering services (Brooks Act); real estate acquisition requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and amendments; competitive procurement of construction services; Davis-Bacon wage rates on federal highway right-of-way projects; WisDOT FDM & Bicycle Facilities Handbook; ADA regarding accessibility for the disabled; MUTCD regarding signage; U.S. Department of the Interior standards for historic buildings. Each WisDOT Region can provide copies of the current *Sponsor's Guide to Non-Traditional Transportation Project Implementation*, and references for sections of the Facilities Development Manual (FDM) and other documents necessary to comply with federal and state regulations. **Applicants who plan to implement their projects as Local Let Contracts using the Sponsor's Guide must become certified that they are capable of undertaking these projects.**

g. If applying for a bicycle facility, it is understood that All Terrain Vehicles (ATVs) are not allowed. Snowmobile use is only allowable by local ordinance. Trail fees may only be charged on a facility if the fees are used solely to maintain the trail. WisDOT reserves the right to require that facilities be snowplowed as part of a maintenance agreement where year round use by bicyclists and pedestrians is expected.

h. The project sponsor agrees to maintain the project for its useful life. Failure to maintain the facility, or sale of the assets improved with FHWA funds prior to the end of its useful life, will subject the sponsor to partial repayment of federal funds or additional stipulations protecting the public interest in the project for its useful life.

i. If the project sponsor should withdraw the project, it will reimburse the state for any costs incurred by the state on behalf of the project.

j. The project sponsor agrees to state delivery and oversight costs by WisDOT staff and their agents. These costs include review of Design and Construction documents for compliance with federal and state requirements, appropriate design standards, and other related review. These costs will vary with the size and complexity of the project. The sponsor agrees to add these costs to the project under the same match requirements 80% / 20% match requirements.

k. Projects that are fully or partially federally funded must be designed in accordance with all applicable federal design standards, even if design of the project was 100% locally funded.

l. As the project progresses, the state will bill the project sponsor for work completed that is ineligible for federal reimbursement. Upon project completion, a final audit will determine the final division of costs as between the state and the project sponsor. If reviews or audits reveal any project costs that are ineligible for federal funding, the project sponsor will be responsible for any withdrawn costs associated with the ineligible work.

m. ***For 100% locally-funded design projects, costs for design plan development and state review for design are 100% the responsibility of the local project sponsor. Project sponsors may not seek federal funding only for state review of design projects.

n. The project sponsor acknowledges that the requisite project completion timeline for approved CMAQ projects will be memorialized in a state-municipal agreement, and failure to comply with the applicable project timeline can jeopardize federal funding.

o. Federally-funded transportation construction projects, with the exception of sidewalks, are likely improvements that benefit the public at large. Improvements of this type cannot generally be the basis of

levying a special assessment pursuant to Wis. Stat. § 66.0703. Municipalities who wish to obtain project funding via special assessment levied against particular parcels should seek advice of legal counsel. See Hildebrand v. Menasha, 2011 WI App. 83.

I confirm that I have read and understand project conditions (a) through (n) above:

Name: *Brian Kober* Title: *Director of Public Works*

Accepted (please initial here): *B.K.*

Fiscal Authorization and Signature

Application prepared by a consultant? ☐ Yes ☒ No
If yes, consultant information and signature required below.

Consultant Company Name: Company Location (City, State):

Consultant Signature (electronic only)**:** **Date:**

NOTE: On Local Program projects, it is not permissible for a consultant to fill out applications gratis (or for a small fee) for a municipality and then be selected to do the design work on a project. A municipality could start their consultant selection process early enough and make the application part of the scope of services with the understanding that all costs incurred prior to authorization will be the responsibility of the local municipality. See FDM 8-5-3 for additional information:
http://roadwaystandards.dot.wi.gov/standards/fdm/08-05.pdf#fd08-05-3.1

Sponsor Agency: **Village of Jackson**

Contact Person: **Brian Kober** (Note: must be Head of Government or Designee)

Title: **Director of Public Works**

Address: **N168 W20733 Main St.**

Telephone: **(262) 677-9001**

Email: **dirpubwks@villageofjackson.com**

Only one project sponsor is allowed per project. As a representative of the project sponsor, the individual that signs below confirms that the information in this project application is accurate. A local official, not a consultant, must sign the application. I understand that completion of this application does not guarantee project approval for federal funding.

Head of Government/Designee Signature (electronic only)**:** **Date:**

Application and Attachments

Submit applications and attachments utilizing the contact information contained in the corresponding CMAQ Program Application Instructions. Eligible applications must be **postmarked on or before *June 15, 2015***, and must include the following documents:

☒ A completed application **in Microsoft Word format**

☒ Narrative Response/Attachment 1: limited to three double-spaced pages of minimum 11-point font size and in Microsoft Word or PDF format

☒ Cost Estimate Detail as required in the Project Costs and Dates section of this application **in Microsoft Excel format**

☒ Project map: printed in black & white, on one sheet of paper size 8½ X 11

☒ **Optional attachment(s): no more than six pages of project description, additional photos, and maps**

WisDOT Information – Shaded area to be completed by WisDOT staff only.

FOR WISDOT USE ONLY – enter the following information at application review	
NOTE: Please add any WisDOT application comments in the comments section on the Confidential page A-5.	
Subprogram:	Project Improvement Type:
Anticipated Environmental Document Type (e.g., programmatic, ER, EA, EIS):	
Region Reviewer's Name:	
Reviewer's Title:	
Date Received:	
WisDOT Region Reviewer's Signature:	Date:
FOR WISDOT USE ONLY – enter the following information after project approval	
Project ID(s):	

ATTACHMENT 1

Narrative Response

1. The intersection improvement will only affect the roadway, approximately 600 feet of roadway. Modifications to existing right turn islands and possibly right turn lanes are expected for appropriate accommodations to meet ADA requirements. As of 2013, the AADT of STH 60 west of CTH P is 15,700 and east of CTH P is 14,000[1, 2]. The roadway tends to be busiest during peak hours since the intersection is close to the US 45 interchange.

2. The Village of Jackson plans to build shared use paths or sidewalks throughout the STH 60 and CTH P intersection and within all four quadrants. Jackson has a shared use path in both the NW and NE quadrant that will connect the intersection improvements to heavily visited destinations on the south side of STH 60. Pedestrian signage will be provided within and in advance of the proposed crossings.

   The new facility will provide safe bicycles and pedestrian travel to local destination spots instead of making these trips by motorized vehicles. The project is located at the westerly entrance into the Village. The pedestrian nodes, along with landscaping efforts within the quadrants will have both visitors and locals taking notice. Native plantings of flowers and shrubs will be planted around and within the quadrants to dress up the paths and nodes. This is part of the non participating items identified in the estimate.

   According to national accepted assumptions, roughly 1% utilitarian trips are by bicycle. Given the connectivity to nearby residential and commercial areas and business growth near the intersection, utilitarian trip by bicycle and through walking will likely exceed the nationally accepted assumptions. Bolstering that argument is the fact that "37% of all households included someone who took at least one bicycle trip in the previous week."[3] As of the census of 2010, there were 6,753 people, 2,870 households, and 1,866 families residing in the village.[6] Based on these statistics, one could expect usage of the system by bicyclists and pedestrians to exceed 3,000 trips per year.

   Pedestrian and bicycle usage will increase to the destinations as the Village of Jackson continues to implement their shared use plan. The project also provides connectivity to the park and ride lot on Apple Lane which is used by commuters using the Washington County Commuter Express (WCCE).

The combination of the Apple Lane Park-and-Ride, the Village's path along CTH P, and the STH 60/CTH P Intersection improvements provides the necessary connections for biking or walking to work, shops and/or school.

Although the project is more of a bicycle and pedestrian project, the project does include streetscaping and landscaping elements. Three of the four quadrants proposed for improvements are to receive a pedestrian node. These are areas to stop and take a rest, visit, or a staging area prior to crossing CTH P or STH 60. These areas will be set in pavers and include benches and trash receptacles. The biggest improvement or feature is that this will be a safe place to cross STH 60, which is long overdue. WisDOT improvement along STH 60 and CTH P intersection have been delayed due to a corridor study along STH 60 and limited improvement funding. This project will increase bicycle and pedestrian trips, reduce vehicle trips through the intersection and provide safe crossing of STH 60 and CTH P. The closest crossings are west of US 45 and at STH 60 and Industrial Drive to the east.

The signalized intersection of WIS 60 & CTH P was analyzed to determine the potential impact to the operational level of service for vehicle traffic if pedestrian crossing signals were to be added with future crosswalks at the intersection. Traffic counts were completed for the analysis during the AM peak hour (7-8am) on June 16, 2015 and during the PM peak hour (4:30-5:30pm) on June 11, 2015. Based on the traffic counts, intersection geometrics, and the signal timing & phasing, the intersection currently operates at a Level of Service (LOS) B during both the AM and PM peak hours. When pedestrian crossing signals were added to the analysis, the cycle length was increased to accommodate the additional green time required for pedestrians to cross the roadway. With the increased cycle length and revised timing & phasing, the analysis shows the intersection is still able to operate at LOS B during both peak hours.

3. The project of the shared use path will reduce emissions by likely reducing the number of vehicles on the roadway. The purposes of the paths are to promote people to walk and bike to the destinations located near the intersection instead of using a vehicle.
4. The goal of the shared use paths is to promote and reduce the number of vehicles on the roadway,

leading to cleaner air and less emissions overall. The installation of the path will allow people to use secondary modes of transportation besides their car to make their way through one of the main and busiest intersections in the village.

5. Employees living near the area of the proposed project hopefully will use the paths developed instead of using their vehicles for short trips. The Household Forecast and Job forecast numbers from SEWRPC show the majority of residents reside in the downtown area of Jackson, or closer to the east side of the Village. Coupling that with the job forecast for the west side of the Village, (IE: the business parks), it becomes evident that the two need to be connected via the shared use paths and bike lanes proposed.

6. The project and shared use paths will be beneficial by promoting other modes of travel within the village for residents, workers at nearby businesses, and possibly any visitors. Giving people a safe place to walk and bike will reduce the number of cars within the area, whether it would be for a quick bite to eat at a local restaurant or needing something at the local gas station. The project will connect to the existing paths along STH 60 and CTH P. The addition of the nodes and paths at this intersection will fully connect the whole system.

If the project is not awarded CMAQ money, the state should consider resurrecting the CTH P intersection spot improvement project. The intersection was in the February 2011 NOI cycle as project ID 2310-08-01.

[1] *http://www.dot.wisconsin.gov/travel/counts/docs/washington/washington-insets2010.pdf*

[2] *http://www.dot.wisconsin.gov/travel/counts/docs/washington/washington-interchange2010.pdf*

[3] *http://www.dot.wisconsin.gov/projects/state/docs/bike2020-plan.pdf*

[4] *http://www.sewrpc.org/SEWRPCFiles/Publications/pr/pr-049_regional_transportation_system_plan_for_se_wi_2035.pdf?*

[5] *http://www.design2construct.com/wp-content/uploads/2011/10/Jackson-Northwest-Business-Park-Colliers.pdf*

[6] *http://en.wikipedia.org/wiki/Jackson_(village),_Wisconsin*

ATTACHMENT 2

Cost Estimate

STH 60 and CTH P Intersection Improvements

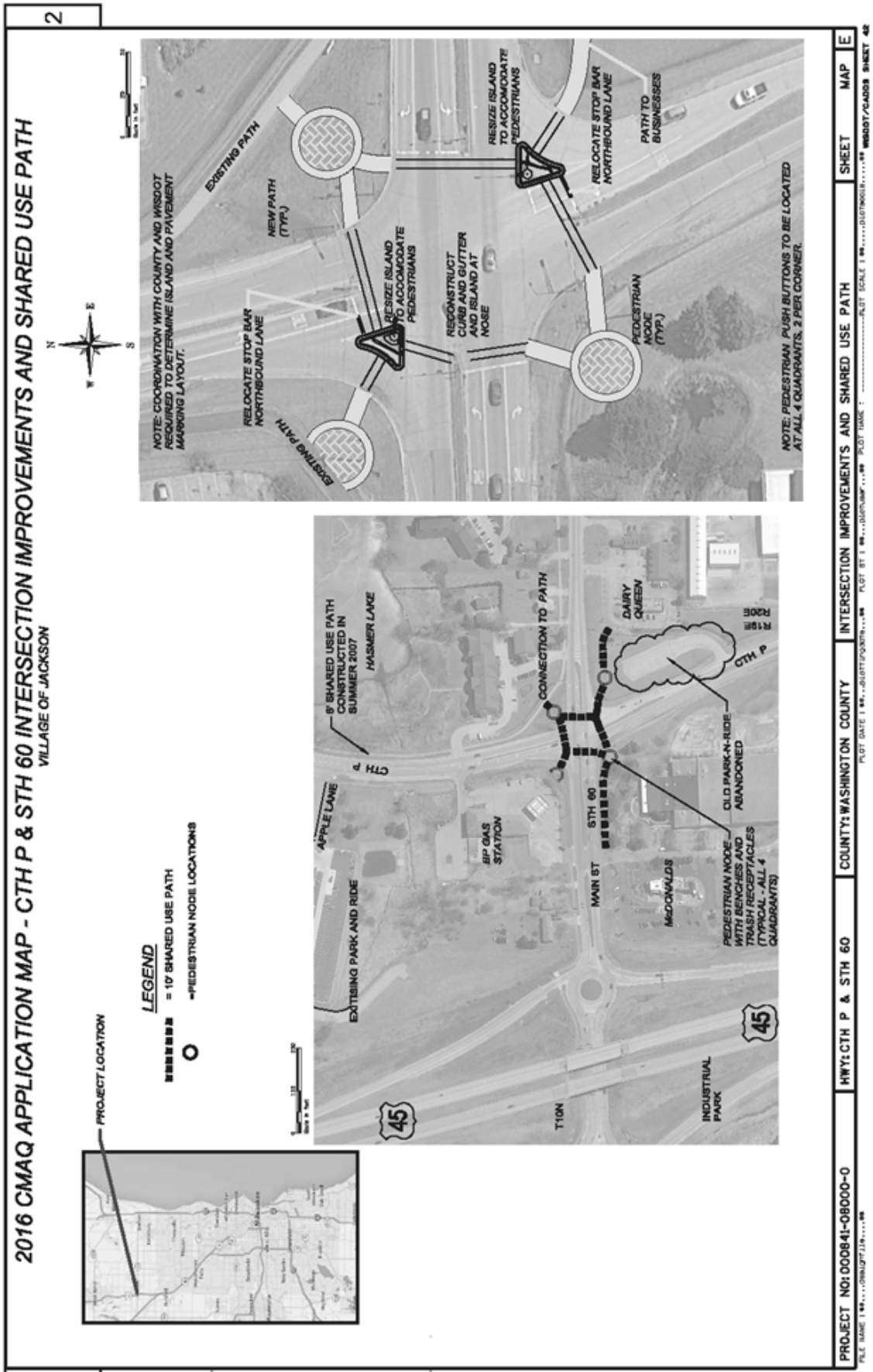
Conceptual Estimate (2016 CMAQ)

Project Segment Type: U **(R = Rural, S = Suburban, U = Urban)**

Summary Item	ITEM DESCRIPTION		STH 60 / CTH P Intersection Reconstruction		TOTAL
Cat. 1000	**MAJOR ROADWAY ITEMS DETAILED**	**UNIT**	**QUANTITY**	**UNIT PRICE**	
1	REMOVING CONCRETE SIDEWALK (ISLAND CONCRETE)	SY	100	$ 7.26	$ 726
2	REMOVING CURB AND GUTTER	LF	400	$ 4.55	$ 1,820
3	HMA PAVEMENT	TON	410	$ 72.40	$ 29,684
4	BORROW	CY	10	$ 20.48	$ 213
5	ASPHALTIC MATERIALS (AC)	TON	20	$ 207.91	$ 4,158
6	BASE AGGREGATE DENSE 3/4-INCH - 2" depth	TON	160	$ 20.42	$ 3,267
7	BASE AGGREGATE DENSE 1 1/4-INCH - 4" depth	TON	320	$ 16.74	$ 5,357
8	SUBBASE (Breaker Run)	CY	30	$ 23.87	$ 716
9	CURB & GUTTER	LF	400	$ 14.61	$ 5,844
10	EXCAVATION COMMON	CY	550	$ 11.76	$ 6,468
11	CONCRETE SIDEWALK 5-INCH	SF	1200	$ 4.69	$ 5,628
12	CURB RAMP DETECTABLE WARNING FIELD YELLOW	SF	200	$ 35.05	$ 7,010
13	STORM SEWER	LF	400	$ 70.00	$ 28,000
14	STORM SEWER STRUCTURES	EACH	8	$ 1,200.00	$ 9,600
Cat. 1000 Subtotal				**Major Roadway Items Detailed S**	**$ 108,491**
Cat. 2000	**CSS / NON-PARTICIPATING ITEMS DETAILED**		Total Item Quantity	**UNIT PRICE**	
15	FREE STANDING BENCHES	EACH	8	$3,000.00	$ 24,000
16	TRASH RECEPTACLES	EACH	4	$1,000.00	$ 4,000
17	PEDESTRIAN NODES / BRICK PAVERS	SF	1000	$25.00	$ 25,000
Cat. 2000 Subtotal				**CSS / Non-participating Items Detail**	**$ 53,000**
Cat. 6150	**SIGNAL UPGRADE ITEMS DETAILED**		Total Item Quantity	**UNIT PRICE**	
18	CONDUIT RIGID NON-METALLIC SCHEDULE 40 2-INCH	LF	1100	$4.25	$ 4,675
19	PULL BOXES STEEL 24x36-INCH	EACH	2	$200.00	$ 400
20	TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT WITH BASE	EACH	8	$1,000.00	$ 8,000
21	PEDESTRIAN PUSH BUTTONS	EACH	12	$350.00	$ 4,200
22	SENSOR RELOCATION	EACH	2	$2,000.00	$ 4,000
23	COUNT DOWN TIMERS	EACH	8	$1,000.00	$ 8,000
24	PED SIGNAL WIRING	LF	1000	$2.00	$ 2,000
25	PULL BOX WIRING	LF	100	$10.00	$ 1,000
26	MISC. SIGNAL ITEMS	LS	1	$10,000.00	$ 10,000
Cat. 6150 Subtotal				**Signal Upgrade Items Detailed S**	**$ 42,275**
Cat. 1000	**ADDITIONAL ROADWAY COSTS**		Total Item Quantity	**UNIT PRICE**	
27	**EROSION CONTROL & RESTORATION**	LS	% of Cat 1000	8%	$ 8,680
28	**TRAFFIC CONTROL & STAGING**	LS	% of Cat 1000	12%	$ 13,020
29	**LIGHTING (USE EXISTING)**	LS	N/A	0%	--
30	**SIGNING/MARKING**	LS	% of Cat 1000	4%	$ 4,340
31	**ROADWAY INCIDENTALS**	LS	% of Cat 1000	30%	$ 32,550
Cat.1000 Addt'l Rdwy Items Subtotal				**Additional Roadway Items Detailed**	**$ 36,890**
32	**DESIGN CONTINGENCY**	LS	% of Cat 1000/2000/6150	5%	$ 36,100
33	**ESTIMATED CONTRACT LET AMOUNT**			**(Cat. 1000,2000,6150))**	**$ 276,756**
34	**E&C**	LS	% of Cat 1000	0%	$ -
35	**CONSTRUCTION AMENDMENTS**	LS	% of Cat 1000	0%	$ -
36	**REAL ESTATE**	LS	N/A	--	$ -
				TOTAL PROJECT COST (2016 CMAQ)	**$ 276,756**

ATTACHMENT 3

Project Map



ATTACHMENT 4

Project Photos

Looking South across STH 60, from NE Quadrant

Looking West across CTH P, from SE Quadrant

Public Works Report
June 30, 2015

Treatment Plant - Designed Capacity – 1.25 million gallons per day
Peak Flow Capacity – 6.0 million gallons per day

Year 2013

January	Avg. Flow 944,193 g.p.d.	Min. Flow 699,000 g.p.d.	Max. 2.054 MGD
February	Avg. Flow 845,179 g.p.d.	Min. Flow 697,000 g.p.d.	Max. 1.394 MGD
March	Avg. Flow 1.028 MGD	Min. Flow 637,000 g.p.d.	Max. 1.028 MGD
April	Avg. Flow 1.473 MGD	Min. Flow 934,000 g.p.d.	Max. 3.042 MGD
May	Avg. Flow 1.167 MGD	Min. Flow 932,000 g.p.d.	Max. 1.908 MGD
June	Avg. Flow 1.1207 MGD	Min. Flow 859,000 g.p.d.	Max. 1.791 MGD
July	Avg. Flow 777,097 g.p.d.	Min. Flow 643,000 g.p.d.	Max. 1.337 MGD
August	Avg. Flow 673,677 g.p.d.	Min. Flow 551,000 g.p.d.	Max. 1.148 MGD
September	Avg. Flow 629,533 g.p.d.	Min. Flow 532,000 g.p.d.	Max. 761,000 g.p.d.
October	Avg. Flow 688,064 g.p.d.	Min. Flow 600,000 g.p.d.	Max. 884,000 g.p.d.
November	Avg. Flow 763,800 g.p.d.	Min. Flow 660,000 g.p.d.	Max. 1.122 MGD
December	Avg. Flow 697,677 g.p.d.	Min. Flow 564,000 g.p.d.	Max. 802,000 g.p.d.

Year 2014

January	Avg. Flow 695,355 g.p.d.	Min. Flow 626,000 g.p.d.	Max. 822,000 g.p.d.
February	Avg. Flow 659,286 g.p.d.	Min. Flow 581,000 g.p.d.	Max. 874,000 g.p.d.
March	Avg. Flow 941,613 g.p.d.	Min. Flow 611,000 g.p.d.	Max. 1.285 MGD
April	Avg. Flow 1.172 MGD	Min. Flow 814,000 g.p.d.	Max. 3.188 MGD
May	Avg. Flow 947,322 g.p.d.	Min. Flow 688,000 g.p.d.	Max. 1.474 MGD
June	Avg. Flow 1.199 MGD	Min. Flow 732,000 g.p.d.	Max. 2.223 MGD
July	Avg. Flow 846,226 g.p.d.	Min. Flow 670,000 g.p.d.	Max. 1.646 MGD
August	Avg. Flow 743,322 g.p.d.	Min. Flow 603,000 g.p.d.	Max. 1.039 MGD
September	Avg. Flow 646,567 g.p.d.	Min. Flow 532,000 g.p.d.	Max. 759,000 g.p.d.
October	Avg. Flow 707,484 g.p.d.	Min. Flow 584,000 g.p.d.	Max. 898,000 g.p.d.
November	Avg. Flow 698,267 g.p.d.	Min. Flow 581,000 g.p.d.	Max. 1.086 MGD
December	Avg. Flow 788,065 g.p.d.	Min. Flow 658,000 g.p.d.	Max. 1.228 MGD

Year 2015

January	Avg. Flow 667,774 g.p.d.	Min. Flow 617,000 g.p.d.	Max. 713,000 g.p.d.
February	Avg. Flow 620,893 g.p.d.	Min. Flow 591,000 g.p.d.	Max. 662,000 g.p.d.
March	Avg. Flow 753,484 g.p.d.	Min. Flow 597,000 g.p.d.	Max. 885,000 g.p.d.
April	Avg. Flow 1.203 MGD	Min. Flow 705,000 g.p.d.	Max. 3.759 MGD
May	Avg. Flow 775,323 g.p.d.	Min. Flow 584,000 g.p.d.	Max. 1.317 MGD

Years Summary of Water Consumption

2000 Total Pumpage 180,485,400 gallons	2001 Total Pumpage 184,613,300 gallons
2002 Total Pumpage 200,630,000 gallons	2003 Total Pumpage 278,246,000 gallons
2004 Total Pumpage 216,055,000 gallons	2005 Total Pumpage 223,215,000 gallons
2006 Total Pumpage 207,719,000 gallons	2007 Total Pumpage 217,224,000 gallons
2008 Total Pumpage 229,613,000 gallons	2009 Total Pumpage 231,160,000 gallons
2010 Total Pumpage 239,326,000 gallons	2011 Total Pumpage 240,268,000 gallons
2012 Total Pumpage 253,492,000 gallons	2013 Total Pumpage 228,371,000 gallons
2014 Total Pumpage 230,973,000 gallons	

Year 2013

Jan.	Avg.	562,000 g.p.d.	Highest Day 837,000 gal.	Total	17,422,000 gallons
Feb	Avg	549,820 g.p.d.	Highest Day 718,000 gal	Total	15,395,000 gallons
March	Avg.	540,520 g.p.d.	Highest Day 725,000 gal	Total	16,756,000 gallons
April	Avg.	585,170 g.p.d.	Highest Day 981,000 gal	Total	17,555,000 gallons
May	Avg.	595,810 g.p.d.	Highest Day 752,000 gal.	Total	18,470,000 gallons
June	Avg.	681,400 g.p.d.	Highest Day 914,000 gal.	Total	20,442,000 gallons
July	Avg.	787,230 g.p.d.	Highest Day 1.039 MGD	Total	24,404,000 gallons
August	Avg.	796,580 g.p.d.	Highest Day 1.107 MGD	Total	24,694,000 gallons
Sept	Avg.	631,500 g.p.d.	Highest Day 838,000 gal.	Total	18,945,000 gallons
Oct	Avg.	850,000 g.p.d.	Highest Day 1.13 MGD	Total	26,310,000 gallons
Nov	Avg.	568,600 g.p.d.	Highest Day 731,000 gals.	Total	17,058,000 gallons
Dec	Avg.	588,230 g.p.d.	Highest Day 701,000 gals.	Total	18,235,000 gallons

Year 2014

Jan.	Avg.	620,550 g.p.d.	Highest Day 789,000 gals.	Total	19,237,000 gallons
Feb.	Avg.	612,390 g.p.d.	Highest Day 717,000 gals.	Total	17,147,000 gallons
March	Avg.	603,710 g.p.d.	Highest Day 678,000 gals.	Total	18,715,000 gallons
April	Avg.	602,600 g.p.d.	Highest Day 1.037 MGD	Total	18,078,000 gallons
May	Avg.	599,290 g.p.d.	Highest Day 729,000 gals.	Total	18,578,000 gallons
June	Avg.	658,000 g.p.d.	Highest Day 815,000 gals.	Total	19,740,000 gallons
July	Avg.	684,320 g.p.d.	Highest Day 881,000 gals.	Total	21,214,000 gallons
August	Avg.	703,320 g.p.d.	Highest Day 1.019 MGD	Total	21,803,000 gallons
Sept	Avg.	639,170 g.p.d.	Highest Day 747,000 gals.	Total	19,275,000 gallons
October	Avg.	658,940 g.p.d.	Highest Day 1.042 MGD	Total	20,427,000 gallons
Nov	Avg.	595,800 g.p.d.	Highest Day 733,000 gals.	Total	17,874,000 gallons
Dec	Avg.	610,970 g.p.d.	Highest Day 742,000 gals.	Total	18,940,000 gallons

Year 2015

Jan.	Avg.	599,680 g.p.d.	Highest Day 719,000 gals.	Total	18,590,000 gallons
Feb	Avg.	587,040 g.p.d.	Highest Day 736,000 gals.	Total	16,437,000 gallons
March	Avg.	582,970 g.p.d.	Highest Day 698,000 gals.	Total	18,072,000 gallons
April	Avg.	601,370 g.p.d.	Highest Day 928,000 gals.	Total	18,041,000 gallons
May	Avg.	585,260 g.p.d.	Highest Day 698,000 gals.	Total	18,143,000 gallons

Pump Capacity - Well #1- 400 g.p.m. Well #2 - abandon; Well #3 -900 g.p.m.Well #4 - 1200 g.p.m. Well #5 – 1,100 g.p.m. Well #6 – 800 g.p.m.

WWTP – Holding & Septage Receiving

2005	$ 87,562.01	**2007**	$152,201.07	**2009**	$183,815.34	**2011**	$220,576.28
2006	$101,115.11	**2008**	$210,441.47	**2010**	$197,653.66	**2012**	$236,224.70
2013	$235,336.46	**2014**	$203,938.32				

2013	**Holdings (gals)**	**Grease (gals)**	**G Decant (gals)**	**Septage (gals)**	**S Decant (gals)**	**Total Billings**
Jan	1,573,249	44,300	8,000	8,050	52,800	$15,821.33
Feb	1,403,100	47,400		6,450	46,300	$14,142.85
March	1,518,450	43,800	28,500	7,250	84,100	$16,957.58
April	1,764,000	68,200	28,500	38,300	294,900	$26,445.80
May	1,666,950	17,700	9,800	74,900	182,000	$21,263.19
June	1,432,600	11,400	4,000	85,750	193,200	$19,694.61
July	1,549,200	19,800		71,300	166,750	$19,560.46
August	1,483,850	13,900	24,000	64,300	170,100	$19,559.73
September	1,306,600	33,200	8,000	69,750	208,200	$19,658.31
October	1,441,750	52,900	17,000	95,550	335,550	$26,163.73

2014	**Holdings (gals)**	**Grease (gals)**	**G Decant (gals)**	**Septage (gals)**	**S Decant (gals)**	**Total Billings**
Jan	1,298,100	26,700	8,000	2,000	40,000	$12,377.30
Feb	1,214,100	42,400	8,000	9,450	16,250	$12,181.61
March	1,411,000	43,200	5,000	10,300	57,200	$14,633.31
April	1,634,000	21,800		39,350	191,100	$19,620.21
May	1,451,750			63,500	199,450	$18,414.39
June	1,553,200			30,900	253,600	$19,225.00
July	1,474,650			40,400	205,450	$17,812.13
August	1,344,650			35,250	187,250	$16,176.13
September	1,308,700		3,500	54,650	246,050	$18,292.51
October	1,431,150			89,350	351,950	$23,106.38
November	1,078,600			66,100	251,214	$17,013.86
December	1,400,900			12,650	162,910	$15,085.50

2015	**Holdings (gals)**	**Grease (gals)**	**G Decant (gals)**	**Septage (gals)**	**S Decant (gals)**	**Total Billings**
Jan	1,326,850			10,250	52,100	$11,663.89
Feb	1,191,500			2,500	45,400	$10,171.26
March	1,507,900			16,150	85,900	$14,102.76
April	1,668,450			35,250	398,200	$23,878.38
May	1,190,850			31,100	148,600	$13,890.38

Cranberry Creek Phase 4
The utility plans have been finalized, and approved by the DNR. Scheduling of the pre-construction meeting is next. The Developer has notified the Village that the Development has been placed on hold.

Stonewall Ridge Development
The Village is waiting for the developer to propose a new site plan. The Village has notified the Developer to install the final lift of asphalt in 2015. We are working on the schedule for the final lift.

Rosewood Drive/TIF #4 Expansion Project
The property has the potential of being Developed.

Laurel Springs Subdivision
The Village has notified the Developer to install the final lift of asphalt in 2015. The Developer (Bielinski Homes) has requested an extension to pave in 2016 when phase 2 of the subdivision in construction. The request is under review.

English Oaks Subdivision
The Village has notified the Developer to install the final lift of asphalt in 2015. We are working on the schedule for the final lift.

GIS Program
Mpower is helping the Jackson Utilities with upgrading the mapping program with working out the details in merging the database to the map.

Digester Upgrade project
The contractor has submitted quotes for the structural repairs on Digester tank #2. Change order #1 has been created to move the project forward. Option to installation scaffolding instead of removing the tank was a cheaper alternative. The cover repair will take an additional six weeks to complete the project.

West Shore Pipeline Break
The punch list items for the Town of Jackson Water Expansion project are being corrected by PTS Contractors. The Jackson Water Utility has reviewed some of the correction and has created a new punch list for the necessary corrections to complete the project. Both flushing station still have water leaks, and are not online. The leaks have been turned over to the supplier and manufacturer for correction. The water service for 3252 Maple Road has been installed in the wrong location and needs to be reinstalled. The work is being done Saturday, June 27th to install the water service on the property. Final completion of the project was scheduled for June 26th.

Respectfully submitted, Brian W. Kober, P.E.